VOL. 8. ROCHESTER, N. Y.—JUNE, 1847. No. 6.

THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

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Fifty Cents a Year:

FIVE copies for $2—EIGHT copies for $3. Subscription money, by a regulation of the Post-Master General, may be remitted by Post-Masters free of expense. ☞ All subscriptions to commence with the first number of the volume.

PUBLICATION OFFICE in Talman's Block, Buffalo street, opposite Reynold's Arcade—where all subscriptions not forwarded by mail should be paid.

POST-MASTERS, and all other friends of Agricultural Journals, are requested to obtain and forward subscriptions for the FARMER. Address D. D. T. MOORE, Rochester, N. Y.

☞ The Farmer is subject to newspaper postage only. ☜

Study the Soil.

THERE are many substances in all good soils which every farmer ought to study till he fully understands their nature and properties. First among these is the abundant mineral called *silica*, or pure flint sand. This earth has many interesting and important properties. It is usually from ten to fifteen times more abundant in all soils than any other mineral. After the organized matter is removed from a soil by burning it at a red heat, it is not uncommon to find nine-tenths of the earth that remains, nothing but pure silica; the other tenth being alumina, iron, lime, magnesia, soda, potash, manganese, and carbonic, sulphuric, phosphoric, and hydrochloric acids. Pure siliceous sand is also an *acid*, having 52 parts of oxygen united to 48 of a metallic base called *silicium* or *silicon*. When ground down to an impalpable powder, (as some of it is in all soils,) silica is sparingly soluble in water. If the water be warm like a summer shower, and especially if it contain a little potash or soda, or both in solution, silica dissolves easier and more abundantly. The quantity of dissolved flint that finds its way through the roots of wheat, corn, timothy, and other plants, into their stems, is much larger than most grain and grass-growers are aware of. Wheat straw usually contains about 67 per cent. of this mineral in its ash.

The most interesting practical question in regard to silica or flint sand is the fact that, the alkalies potash or soda seem to be indispensable to convert it into an available food for the growth of plants. These alkalies exist more or less in the ashes or earthy portion of all plants. Being extremely soluble in sandy, pervious soils, they are apt to be leached out by tillage, and the land is rendered sterile, unless often laid down to grass, and renovated by the application of *wood ashes*, *salt*, gypsum, and lime, or their equivalents in stable manure.

Alumina is the next most abundant mineral usually found in all soils. Unlike silica, it has alkaline properties. Like potash, soda, lime, and magnesia, it is the *oxide* of a metal, i. e. a metal combined chemically with oxygen. The metal is called *aluminum*, of which there is about 53 parts to 47 oxygen in pure alumina. This earth combines chemically with the acid silica and forms the pure porcelain clay, from which translucent china ware is manufactured. Alum is a compound salt formed by the union of sulphuric acid (oil of vitriol) with alumina and potash. Alumina does not enter plants, and form a necessary constituent in their organization. Only traces of it have been found in their ashes. It exercises an important office, however, in all fertile soils by increasing their capacity to absorb and retain moisture and nutritive gasses about the roots of vegetables. A soil that contained no alumina would be radically defective. It gives adhesiveness and plasticity to all clays. Without it, the valuable salts of potash, soda, lime, iron, &c. would remain but a short time in the surface soil, and within the reach of plants. Phosphoric acid is often combined with alumina. Throwing the organic matter out of the account, and the eighty or ninety specimens of soil analyzed in the laboratory of the writer within the last year, have contained on average from four to seven per cent. of this mineral.

The next most abundant substance in the soils of Western New York after silica and alumina, is *iron*. Like those just named, this metal is combined with oxygen forming the red rust of iron. This is called in the language of chemists the "*per*-oxide of iron." When a bar of iron is heated in a blacksmith's forge and hammered, the thin scales that fly off are called the *prot*-oxide of iron. The difference between these black scales and the rust of iron is that the latter contains about a third more oxygen than the former.* When the oxide of iron unites with the oil of vitriol, it forms the well known salt called *copperas*, (sulphate of iron.)

Iron is found among the incombustible elements of all, or nearly all plants and animals.—Thus iron is found in the blood of all red blooded animals, and of course must exist in their food. This metal exerts a powerful, but not very well understood function in the economy of vegetable and animal life. It is believed by Mr. DOWNING of the Horticulturist, to be a specific against the "yellows" in fruit trees. Copperas water has been thrown with a syringe over the leaves of pear and peach trees thus affected, and it is said with entire success. The application of old iron about pear and other fruit trees, is strongly recommended. We have found from two to six per cent. of the oxide of iron in the soils that we have analyzed. In low land, there is apt to be an excess of copperas, and other salts of iron. Thorough draining is the remedy for this. In dry uplands, it is possible that old and long cultivated fields may lack salts of iron. Very few experiments have been made to test the value of this mineral as a fertilizer for grain crops.

Lime is the next most abundant ingredient in the soils of this region. It is very seldom that we find more than 2½ per cent. of this alkaline earth in any soil. There are exceptions, however, where the proportion of lime increases till it amounts to a calcareous marl.

In 100 lbs. of pure common lime-stone, irrespective of water, there are within a small fraction 56 lbs. caustic lime united to 44 lbs. of carbonic acid. This acid is expelled in burning lime in kilns. On long exposure to the air, quick lime absorbs both moisture and carbonic acid, and becomes a mild carbonate, such as is found in soils.

It is an interesting fact that soils which overlie a lime-stone rock, and that pretty near the surface, are often greatly benefited for producing wheat by a top dressing of burnt lime of 50 bushels per acre. Judge PORTER, of Niagara Falls, has tried this practice on a large scale, where the lime rock was within two feet of the top of the ground. It was followed by a marked improvement in his wheat crop. On Gen. HARMON'S farm the application of lime seems to do little or no good. If our memory serves us rightly it contains on an average less than 2 per cent. of lime in its surface soil. Gypsum, however, (which is formed by the union of lime with oil of vitriol) is of essential service. Pure quick lime is formed by the union of 20½ parts of a metal called *calcium* with 8 parts of oxygen. The most valuable compounds of lime are gypsum and apatite, (bone earth.) The former is a compound of *sulphur* and lime, and the latter of *phosphorus*. Both of these simple elementary bodies are of vital importance in the growth of cultivated plants, and the organization of all animals. Combined with oxygen they form strong mineral acids, which are neutralized by readily uniting with iron, alumina, lime, potash, soda, and magnesia, in soils. Practical farmers have too long neglected to study the economic value of the various compounds of sulphur and phosphorus. Gypsum is the only mineral, the importance of which is at all appreciated. Its superiority over lime consists in the fact that it furnishes clover, peas, wheat, and all other plants, sulphur as well as lime. A moment's reflection is sufficient to convince any farmer that no animal can form its bones without lime. And if his soil wholly lacks this mineral, his crops can not possibly create it out of nothing. Nor could an ox or horse have a particle of bone in its system if its food contained no lime. But lime *alone* is not capable of forming bone. *Phosphoric* acid is indispensable for that purpose, associated with lime. Nearly all that is taken from the soil in the kernels of grain, is removed *never* to return. A great deal of the phosphorus that escapes from the bodies of animals in their liquid and solid excretions, is lost to the fields that yield the daily food of these animals. And yet pure phosphorus is so precious, that a pound of it is worth to-day three dollars in the city of Rochester!

It is not book-farmers, but practical agriculturists in Holland and Belgium that make money by giving two pounds sterling for the urine of a single cow a year. They estimate the surface by the square yard which it takes to make a pound of beef, butter, or cheese. They feed their living growing plants, as well as their living growing animals. Wheat is now worth in this city $1,50 a bushel, and yet not one farmer in ten can afford to study, or let his sons study, the things that nature uses in forming 40 bushels of wheat on an acre! Who cares whether the straw or stems of this plant are hard, bright, strong, and glassy, little liable to rust, or crinkle, by reason of its containing a good deal of *silica* in its tissues? Science tells the wheat grower how to dissolve fine atoms of sand at the roots of his grain, and avoid the growth of coarse, open, weak, and spongy stems, which will break down with an ordinary shower and wind, and form a nidus for the seeds and rapid maturity of parasite

* *Prot*-oxide of iron is formed by the union of an atom of iron with an atom of oxygen. The *per*-oxide by the union of 2 atoms of iron with 3 of oxygen.

plants. Study the soil and learn how to dissolve flint, and form with it a covering to the stems of your wheat and other grain.

Study the soil and understand the true value of alumina, iron, lime, potash, soda, magnesia, sulphur, phosphorus, carbon, nitrogen, oxygen, and hydrogen. These are the ingredients that Providence has ordained to form the bodies of all that lives, whether vegetable or animal.

In a future number we shall resume the consideration of this subject.

Draining Lands.

The Mark Lane Express of a late date contains a long bill now pending before the British Parliament, designed to secure the well known advantages of perfect drainage to all the tillable lands in the kingdom that need it. We allude to this subject because we happen to know that there are many thousands of acres in this State, whose productiveness would be largely increased by the removal of surplus water. We speak not of swamps, but of improved lands now in tillage. It is a curious fact in the history of British husbandry, that 100 years experience in draining has been necessary fully to impress on the public mind the necessity of removing all standing water that rises nearer than three feet to the surface of the ground, whether in pasture, meadow, or corn. It often happens in this State, and particularly in the western portion of it, as well as in England, that where streams are very level, one farmer cannot drain his low lands without deepening the channel of the stream on the lands of others below him. To attempt this, as our laws now are, and those of England are at this time, is impossible without trespass. Besides this, it is unreasonable to expect one land holder to drain two, three, or ten farms, on a common level of low land, for the sake of making his vastly more productive and healthful. To say nothing of greater fertility, the increased salubrity of the neighborhood is of itself matter of sufficient importance to require the interposition of law. The English bill before us creates a Board of Commissioners, whose office is not unlike that of our road Commissioners in laying out highways for the public convenience through improved farms. Where the natural fall is insufficient to take off the stagnant water, steam power will be used to pump it out into rivers or the ocean. Mr. Colman describes one large engine that effectually drains 20,000 acres of waste moor land, which now gives constant employment to 5000 laborers in its tillage.

Monroe county has 281,011 acres of improved land. More than ten thousand acres of this needs draining. The erection of a dam by the State across the Genesee river, on the very rim of the basin of the Genesee Valley, has driven the water back, not over the surface, but *too near the surface* of several thousand acres of as good land as the sun shines upon. That this results in creating much miasma, sickness, and premature death, no one doubts.

Surely, if human life and health are worth anything, the wrong is one of fearful magnitude. To impart a free draft to the water that falls on the broad level surface above the Rapids, instead of building a dam across the river at that point, the highest edges of rocks should be blasted and dug out, that the fertile lands above might escape their present injury from standing, stagnant water.

With skillful culture, and a reasonable price for grain and other crops, these extensive bottoms would yield as much nett profit as is now realized from all the water power in this city.—Rely upon it, the amount of injury that annually accrues in this county alone, from *under*-surface water that remains too long below the soil, is not one-tenth part appreciated. This excess of moisture rises by capilliary attraction, and arrests the salutary decomposition of the organic and mineral substances, on which all cultivated plants depend for their due nourishment. The constant evaporation of this water, as every body knows, consumes much sensible heat, and keeps the ground cold and unproductive. Experience, (the true test,) has demonstrated that, the grass and herbage which grows on half drained land in England, will not make so much nor so good butter and cheese, as may be obtained from the same surface, after thorough draining. An acid soil and sour plants are not the things on which to make fat beef and mutton. Many a farmer knows this. Considering how much we all depend on the prosperity of agriculture, it is a standing mystery to us that so little is done to improve the soil in New York. Think of it, in more than two-thirds of the towns in the Empire State, our rural population is *diminishing!* In no part of the world is the science of agriculture more cordially and generally despised. It is now 26 years since Judge Buel began his efforts in the Legislature to induce it to establish at least one agricultural school. These have been kept up from that day to this. A report was made a few days since by a committee in the House, *against* an application to aid a little in starting a school of this kind near the city of New York, under the charge of the American Institute. This report seems to imply that to give a few dollars for an agricultural school, is not merely a waste of money; but an intimation that both the soil and its cultivators can be improved in the State of New York! Thousands believe this a libel on their skill and intelligence.

Assuming that the laws of nature which control the production of cultivated plants are sufficiently understood by the tillers of the earth, farmers in the Legislature are ready to vote tens of thousands a year to teach young men "to speak Greek, as natural as

pigs do squeak," as the following statutes show:

By act chapt. 237, passed April 17, 1833, $6,000 annually was appropriated to Geneva College, and the same sum to the University of New York, and $3,000 to Hamilton College, to be paid for five years 'until otherwise provided by law,' which has been, it appears, paid to this time, amounting in 9 years to	$135,000
By act chapt. 297, passed May 14, 1840, the Comptroller was directed to discharge a certain judgment obtained against the University of New York, for a large quantity of cut stone furnished at the Sing Sing States Prison, for that Institution, amounting to	9,860
By act chapt. 221, passed May 25, 1841, $5,000 per annum was appropriated to Geneva College for three years,	15,000
By act chapt. 279, passed May 6, 1844, $1,000 annually was appropriated to Geneva College, and $3,000 annually to University of New York, for five years, 'and until otherwise provided by law,' which has been paid to this time, amounting to	12,000
Making actual sum received,	$171,860
Besides this Geneva College and the University of New York are yet entitled by law, to $4,000 per annum for two years,	8,000
Making the amount appropriated,	$179,860

The new medical school in Buffalo has received a bonus from the Treasury, of $1,000. We do not complain of any of these appropriations. They are alluded to merely to demonstrate the fact that, the idea of gaining anything from the study of agricultural chemistry, geology, and physiology is treated as utterly preposterous.

But to return to our text, the draining of lands. We confess our anxiety to see this subject command far more attention in this country than it has ever yet received. No soil can be warm and fertile that contains too much water. Nor can it be easily worked with the plow, or other implement. The English have been constantly sinking their ditches deeper and deeper for 20 years, because drains 3½ and 4 feet deep give crops enough to pay, and more than pay the extra cost. A deep soil, pervious alike to air, water, and the roots of plants, is uniformly found to be the best land to produce, and the easiest to cultivate.

"The Distribution of the Inorganic Mattter in Vegetables."

UNDER the above heading the American Journal of Agriculture and Science for April contains a paper of 29 pages, which gives the results of a vast amount of analytical research. Prof. EMMONS has been some years in the employ of the State in connection with its voluminous and original work, embracing the whole range of the natural history of New York. That part of this very expensive undertaking which relates to agriculture and rural economy, will be of incalculable value for the many new facts developed, showing the mineral food of our fruit and forest trees, as well as annual and biennial plants. Let us first consider the ash of the Apple tree:

	Sap wood.	*Heart wood.*
Potash,	16.19	6.620
Soda,	3,11	7.935
Chloride of sodium,	0.42	0.210
Sulphate of lime,	0.05	0.526
Phosphate of peroxide iron,	0.80	0.500
Phosphate of lime,	17.50	5.210
Phosphate of magnesia,	0.20	0.190
Carbonic acid,	29.10	36.275
Lime,	18.63	37.019
Magnesia,	8.40	6.900
Silica,	0.85	0.400
Soluble silica,	0.80	0.300
Organic matter,	4.60	2.450
	100.65	98.535

	Bark of trunk.
Potash,	4.930
Soda,	3.285
Chloride of sodium,	0.540
Sulphate of lime,	0.637
Phosphate of peroxide iron,	0.375
Phosphate of lime,	2.425
Phosphate of magnesia,	
Carbonic acid,	44.830
Lime,	51.578
Magnesia,	0.150
Silica,	0.200
Soluble silica,	0.400
Organic matter,	2.100
	109.450

On studying the composition of the ash of the bark of the apple tree, we are forcibly struck with the fact that 109½ parts contain over 96 parts of lime and carbonic acid. In other words a very large share of the earthy elements taken from the soil, and stored in the bark of an apple tree, is nothing but common lime stone. The importance of *lime* in the organization of smooth healthy bark, and the vigorous growth of an orchard, can be inferred with the utmost certainty. There are other minerals in the ash of the bark of the apple tree that should not be overlooked. But as we are pressed for room, we must pass to the ingredients found in the ash of the sap and heart wood.

We ask particular attention to the facts that, the sap wood contains 17¼ parts of bone earth, (phosphate of lime,) while the heart wood has only 5¼ per cent. of that mineral. It has long been known that the seeds and fruit of plants and trees contain a much larger quantity of phosphates in their ash, than is found in the ash of their trunks or stems. But if we mistake not, to Prof. EMMONS belongs the honor of being the first to discover the curious law in vegetable physiology that the *sap wood*, through which all the fluids pass from the roots to the seeds and fruit in the top of the tree, contains more of the phosphates than either the heart wood or bark of a tree. If Nature is prolific in the production of seed to perpetuate the race, and exceedingly careful in protecting the germs of the next generation, she is at no less pains to store up *phosphates* along the surfaces of the ascending tubes or vessels, to be borne upward with the sap, when needed, to organize the embryo of each living being.

By carrying the fruit of an orchard out of it every year, is it not plain that whatever amount of bone earth, alkalies, sulphur, iron, &c., is taken away from the soil in the crop, should be restored to it again in some available form?—

How few fruit growers duly appreciate this cardinal principle.

Ash of a Fungus, (Boletus ignarius,) growing on an Apple-tree.—The inside of the fungus is soft and corky, the outside is hard and unyielding. The difference in texture led to a separation of the fungus into two parts.

	Outside.	*Inside.*
Potash,	21.25	15.36
Soda,	4.29	4.00
Chlorine,	1.58	0.80
Sodium,	1.04	0.52
Sulphuric acid,	2.58	2.30
Phosphate of peroxide iron, Phosphate of lime, Phosphate of magnesia,	12.20	18.11
Carbonic acid,	14.39	10.80
Lime,	20.31	2.13
Magnesia,	0.60	0.20
Silica,	3.30	8.30
Soluble silica,	0.20	0.70
Organic matter,	11.20	16.50
	92.94	90.45

The injury which fruit trees sustain by fungi and lichens growing upon them, is evident from their analyses. The nutriment is all derived from the bark and wood of the tree; and besides, these parasites produce and hasten the decay of the tree.

Ash of a Lichen, (Gyrophora vellea,) growing upon gneiss, at Little-Falls.

	Lichen.
Potash,	8.850
Soda,	2.588
Chlorine,	2.938
Sulphuric acid,	2.738
Phosphate of peroxide iron,	10.937
Phosphate of lime and magnesia,	10.188
Carbonic acid,	2.667
Lime,	2.926
Magnesia,	0.380
Silica,	44.000
Soluble silica,	1.000
Organic matter,	9.250
	98.094

Several years since, seeing a lichen growing on a gneiss boulder, we tore it off, dried, pulverized, and moistened it with pure rain water, and planted timothy seed in it. The moss was placed in a coffee cup. The crop was duly watered with rain water caught in a clean vessel as it fell from the clouds. The timothy came to maturity in due time, and was dried, pulverized and added to the decaying moss, in which it grew. Two kernels of peas were planted in the compound, and made to bear seed. From these seeds human flesh could easily have been formed. Here was only three generations of plants intervening between a naked, solid, flinty rock, and a living human being.

Who will disparage the study of rocks, soils, and lichens, seeing as we do that they have a relation so intimately blended with our daily food and clothing?

The True Law of Population.

Some new ideas on population have been broached by Mr. Doubleday, in a publication lately made by him entitled "The True Law of Population." This law of population, he endeavors to show, is connected with and depends upon the *nature* of the food of the people. Mr. Doubleday says "his theory is founded on the admissions of all medical and physiological authorities of modern times, and supported by many of ancient times, and is corroborated by an appeal to living generations." He affirms that "populations are uniformly found thin in pastoral countries, where the food is animal food chiefly; denser, where it is mixed partially with vegetable element; denser still, where it is vegetable only, but with plenty; and densest of all where it is vegetable, but with scarcity superadded."

The examples which the author quotes from the history and condition of the world go far toward establishing his theory. If he be correct, the true remedy for excessive numbers, is not emigration, but plentiful and nutritous food.—He divides society into three classes—"the worst dieted, the moderately dieted, and the luxuriously dieted;" and observes "that it is upon the numerical proportion which these three states bear to each other in any society, that increase or decrease on the whole depends." Mr. Doubleday's argument derives considerable support from the decay of opulent families, and their rapid extinction. We have abundant evidence of this at various epochs, and in different countries.

Tacitus gives us one instance in the reign of the Emperor Claudius. If we turn to England we shall find that, but for comparatively new creations, both the peerage and baronetage of England would have been extinct. The number of English peers in 1837 was 350, of which 247 had been created since 1760. The decay of the baronets had been more remarkable still. So that if no new peers had been created since 1670 the present number would have been only 103, and but for perpetual new creations there would scarcely have been a baronet left. Mr. Malthus noticed a similar decay in the higher and wealthier families of Berne, in Switzerland; and Mr. Sadler cited Addison's authority to prove the extraordinary decrease of the Venetian nobility.

If Mr. Doubleday's theory be true, and it be a law of nature that the worst dieted people shall become the most numerous, then pauper relief to Ireland, in the shape of poor food, will only aggravate the evil. The effectual remedy is to give the Irish people a sufficiency of animal food; Irish produce must be consumed in Ireland instead of being exported. The standard of living must be raised; but it will not be raised by the introduction of the poor laws, and feeding the hungry crowds with poor-house food. This will only aggravate the evil through each successive generation. Mr. D.'s book is deserving the serious consideration of political economists and statesmen.

Rats.—A red herring firmly fastened by a string to any place where rats usually make their run, will make them leave the place. It is said to be a fact that a toad placed in a house cellar will have the effect of expelling the intruders.

The Farmer.---His Position, Responsibilities, and Duties.

NUMBER EIGHT.

PATIENCE and perseverance are cardinal virtues, and indispensable in enterprises of difficulty. No great good was ever yet accomplished, no important work completed without their exercise. It is the continued effort, the unceasing labor, that, in the end succeeds—it is the shovel full of earth oft repeated, that by and by removes the mountain. The principle is equally applicable in moral as in physical effects; patient investigation and persevering experiment are the great levers in the advance of science; and it is by the oft repeated and long continued presentation of truth, that men are brought to adopt and follow moral precepts as well as the truthful results of science.

In view of these general truths I would bid the farmer who is praying for the elevation of his calling, to be of good cheer. The work is progressing, the end will come, so surely as the few choice and truthful spirits who are engaged in the work faint not, nor falter in their slow but steady march. Patience and perseverance will overcome every obstacle, and triumph over all difficulties. Months nor years are not enough for the great work. The progressive movement requires a series of years; nor must we anticipate a smooth and easy march. No; the ascent must be accomplished amid storms and trials—but if amid them all we keep the eye heavenward, and if, like the poet's mountain hero, we keep upon our lips the inspiring word "excelsior," depend upon it we shall in the end reach the mountain top, and find the great and ever-growing interest, the profession which embraces the mighty mass of the people of this country—in other words, find the farmers and the farming interest elevated to its true position, at the head and above every other class or interest in this land, in point of political influence, and moral, intellectual, scientific, advancement.

In such a position ought the farmers to stand. From their bosom should emanate our statesmen, our judges, our professors, our scholars—and so it will be, in this land, before another half century. Look at the great inheritance which the God of heaven has given to this people—look at her boundless territory, her broad and cultivated fields, and her boundless forests, yet untouched in all their virgin purity and richness, and then calculate their capacity for agricultural production—their limitless power to grow food for man and beast—then turn from the broad acres to the political institutions, which spread their genial and invigorating influence over the whole of land, and lake, and river, which unite to make up the mighty Republic, and then tell me if there be not a high and glorious destiny in reserve for the agriculturists of the United States. Ancient nor modern times afford no parallel to the position and destiny which awaits the farmers of America, as a class, if they are true to themselves—if to their natural advantages of soil, territory, and institutions, they add that higher ingredient, intellectual superiority. And how, I ask, is that to be done, but by intellectual culture, mental training and discipline? Let me here repeat the adage, "knowledge is power;" few will controvert this. But knowledge is not intuitive—it does not come unbidden—it does not bless unasked; it will be wooed if it would be won—it must be sought after if it be obtained. But how is it to be had, unless these means and advantages at hand for the attainment of the end, Education, can only be had through certain channels or agencies—and it is idle to expect the result by intellectual superiority, without a *supply and use* of the means adequate to produce it. Yet here is another and important difficulty which meets us at this point, and that is the *disposition to use* the means which, to a limited extent at least, are now open to the farmers of the country, and which may be hereafter opened to them. The first point to be aimed at, in my view, is, to convince the agriculturist that intellectual culture, scientific attainment, and mental polish, are essential to his standing individually—to the elevation of his class, and to success in his calling; and when the farmers and the sons of farmers have reached that point—when they come to see and acknowledge the importance and necessity of becoming intelligent and scientific men and farmers, they will then soon set themselves about providing the necessary facilities to reach the desired end.

There are various means of intellectual culture in the general sense. The school, the lecture, the newspaper, the debating society, and various other associations and means, are all general instrumentalities for the mental culture of the masses in this country, and these the farmers of the country may use. Give them but the desire, and these means may, by the proper direction and changes, be made beneficial to the farmers as a class; and so they will be whenever the farmers of the country demand and insist upon, and patronize agricultural schools, and lectures, and papers, etc., etc.

Patience and perseverance are required on the part of the few, to bring the great mass to appreciate the importance of the intellectual part of farming. Gradually but surely the work is being done. The last ten years has wrought a great change in the views and feelings of farmers on the points indicated, and the next ten years will witness yet greater changes. The Legislature of the State begins to feel the impulse, and this I look upon as an important fact and the beginning of better days. A bill has been reported for the establishment of an Agricultural and Me-

chanical School, upon what principle I am ignorant; but the fact itself is instructive of public sentiment, and should be hailed as a good omen. The time is at hand when the Empire State, and other agricultural States, are to have their Agricultural Schools and Colleges, and when our sons *will study and learn as a part of their education* the theory of tilling the soil—the time and correct principle for plowing, and sowing, and gathering in the productions of mother earth; and from these higher schools shall go out a wave which, in the end, will reach the remotest district school house in the Union. I think I clearly see the future; and seeing it, I can confidentially bid the farmers of America be of good cheer—the elements of progress are with them—the principle of advance has been planted in their midst, and it cannot be choked.

Next month I will continue this subject with a more particular notice of the influence of newspapers to agricultural interests.

Penn Yan, April, 1847. D. A. Ogden.

Winter-killed Wheat. --- Draining.

Mr. Editor:—Foremost among the various farm crops produced in Western New York in importance to the agriculturist, man of commerce, and the consumer, stands the Wheat Crop. Whatever affects that, for evil or for good, affects the temporal well being of all in the community. Among the many calamities which cause a failure of this crop none equals what is usually denominated winter-killing. The past season, up to the present time, has been estimated by most farmers to have been one of our worst—and serious apprehensions may very justly be entertained that extensive damage will be sustained from this cause. However, in this town the last three favorable days have dispelled most of the fears of our farmers in relation to it here, as the sudden greenness it has assumed shows that it has not been much damaged.

But the cause, and the cure, of this calamity is a matter of more importance to know, than any speculations in relation to the extent of damage done to the present crop. Both, to my apprehension, are easily understood. The cause is the superabundance of surface water in the soil; and the cure, to provide means, either by a thorough system of underdraining, or some other method to draw it off so as to lay the young plants dry and warm.

It is a common remark which all practical farmers make, that the longer they plow and work their land, the heavier and more retentive of moisture it becomes; this explains the reason why, in numerous localities the land is so much more liable to heave, than when the country was new; then, the sub soil being more permeable the water percolated through it, acting as a natural conduit; now, it stands upon the surface, or fills the earth like a sponge, till it is evaporated by the sun and winds.

What are usually denominated timber lands, are the most liable to damage from this cause.—This description of lands have usually a retentive sub-soil, particularly where you find it to consist in alternate ridges and black ash swales; the ridges are esteemed the best wheat lands because they are dryer, but if the superabundance of moisture were drawn off the swales would be the best, as they have been enriched by receiving the fertilizing elements from the high ground for ages, and therefore must contain all the grain forming elements in the greatest abundance.—But these are the lands which are most liable to damage by winter-killing.

We have on one of our best fields for wheat growing a swale, or basin, containing about 1½ acres of this description of land, which, for one or two crops after it was brought under cultivation produced wheat well; but afterwards utterly failed, for many years not producing enough to pay the expense of harvesting. Three years ago we put in some underdrains, sowing it to wheat in the fall; the crop was much the best part of the field. We have it now in wheat, and it has gone through the winter with less apparent damage than many other parts of the field. The first crop paid all the expenses of putting in the ditches; they have not only rendered it permanently valuable wheat land, but improved it in nearly an equal degree for all other crops.

If a thorough system of draining was adopted, it would add many millions of bushels of wheat to the annual product of this State. However rich the soil in all other necessary elements, if there be a superabundance of surface water, it will be ruinous to the crop. It is this, more than all her scientific manuring, that has so immensely increased the production of wheat in Great Britain, during the last quarter of a century. By its aid many millions of bushels of wheat have been added to the annual product of that island, from lands which forty years ago were esteemed only fit for growing oats and other spring grains.

But the question will naturally be asked, Will it pay the expense? In very many cases, perhaps most, it certainly would. If our farmers could *buy* good wheat lands for thirty dollars an acre, they would consider it cheap; now, if they can cause that they already possess, which will not now produce wheat, to yield them from twenty to thirty bushels per acre, would it not well pay a pretty large outlay to attain so desirable an end—especially when it is remembered that it would make the land more valuable for other crops?

It is not the object of your correspondent to point out how this is to be done, but to call the attention of our farmers to this subject, which is one of very great importance to the agricultural

interest in this State. Who will make an experiment on a sufficiently large scale to test its expense and its utility? Whoever will do this, will earn the title of a benefactor to his country; and, if successful, will be sure to have abundance of followers, as our farmers are not such dolts as to refuse to do what they plainly perceive to be for their interest. W. S.

Wheatland, April 7, 1847.

On Growing Corn.

MR. EDITOR:—In looking over the pages of your valuable paper from month to month, as they are issued from the press, I am led to the conclusion that agricultural pursuits are, at the present day, assuming an honorable place among the professions of the age in which we live; and that the friends of this calling are, or should be, considered one great brotherhood, each endeavoring to contribute something to the fountain of knowledge that already exists, at least to some extent. And we believe the tiller of the soil at no very distant day is destined to stand (if not first) among the most honorable of his age, and his profession will hold a conspicuous place among an enlightened and happy "American" people.

The department of husbandry to which I shall allude, at present, is that of growing corn. This crop is now becoming a very important one to the American farmer, and particularly so to those living in the Western States—and we who live in Western New York are not a little interested in the crop, as it will yield us a fair reward for our labor, provided the labor be judiciously applied. And who does not feel an abundant assurance that a ready market is found in Ireland and in various parts of Europe, for all kinds of grain that may be converted into bread? How long this state of things may remain is yet veiled in the future; it will however remain for years unquestionably.

By adopting the following method I have been more successful in growing corn than any other that has come under my personal observation.

In preparing the ground spread on a very liberal coat of manure before plowing; that taken from the cow stable is preferable on my land, (a gravelly soil.) Deep plowing will produce a greater growth in the latter part of the season, though the corn may not start quite as soon in the early part of summer. Cultivate or drag the ground with the furrows, that the grass may remain under.

Mark the ground three feet each way. Deep marking I have not found as good as light.—Sometimes soaking seed will facilitate its growth, though generally I choose to plant my seed dry.

As soon as your corn is up so you can see the rows, start a cultivator—go through each way—take the weeds and grass from the hill, and give the corn a light earthing. When you have got through this process, put on your plaster. The remaining team work for the season should be done with the plow, in order to bring up the soil to the rays of the sun, and also within reach of the fibres of corn that are despatched in every direction from the hill to secure nutriment for the stalk. Before hoeing the last time a liberal quantity of wood ashes should be applied to each hill. The plaster will produce a good growth of stalks—the ashes will greatly increase the number of ears and add to the length and filling out of the same.

I have tried manuring in the hill, but in dry seasons it will not do as well. I have also tried putting lime, ashes, and plaster in the hill, then droping the seed on that and covering it in that way—but with no very good success.

Locke, March, 1847. J. D. C.

Fences.

MR. EDITOR:—Your correspondent MR. MANLY has been treating the readers of the Farmer with an essay on the subject of the situation the country is exposed to in the want of rail timber and cheap fences—a matter which, in my opinion, requires more attention than is generally bestowed upon it. I have also something to say about fences, and, with your permission, will give my opinion and observations.

Stone fences are not to be sneezed at, especially by western farmers who have no stone to construct them with—for there is none more durable or more safe, and I hold that a good fence on a farm is better than opium to make the owner sleep at night. He feels safe that he shall not wake up and find a whole drove of horses, cattle, sheep, and hogs, holding festival in his corn and wheat fields.

There are many who would be astonished to learn with what slim and contemptible means, what mere chips and shivers of stone, a good and lasting fence can be made. Let me enlighten you, dear reader. In the first place, in the line of your fence, sink and embed all the large boulders and ugly shaped hard heads firmly in the earth; then fill up the vacancies between with the next worst ones, till you form a pretty uniform course. Then commence with the small ones, even if it takes three or four to make the width, and constantly interpose headers of white cedar, chestnut, or oak; if no larger in diameter than your two fingers, they will answer. Build it quite *buttering*, as the masons say,—30 inches to 3 feet at the bottom, and at 4½ feet high, 1 foot. Now the next requisite to make the wall stand, and it is impervious, is to save and select from your materials a sufficient quantity to cap the whole. They should be a cleverly large size, considerably larger than a piece of chalk; in short they should either be a foot long, so as to reach across, or one foot wide, and the longer

the better. If not as flat as is desirable, chink and cobble up till they lay firm and secure.

Fences built of these light materials do not answer so well to set posts and increase their height by adding a couple of narrow boards, as the winds have too much power to disturb the structure.—But in those cases where stone enough cannot be found to build the entire fence a very pretty expedient is resorted to. At about 6 inches from the ground a sill of 3 by 4 scantling or other wood is laid into the wall, projecting beyond it about 3 inches at each end—far enough to make a 2 inch augur hole at the same angle as the wall, in which are fitted two stakes or rounds, with one or more yokes of 2 inch stuff, bored and fitted on, to lay on poles or rails—or another short rail may be fitted on the top of the fence, into which the stakes enter, and into which is morticed a post to nail board to. This makes a very secure and durable fence, even when the stone work is only two feet above the surface.

In your next number, if your readers will tolerate me, I will give you another yarn about Fences, being something of an itenerant and an old pedlar—but now old FARMER TIM.

Monroe County, 1847.

Chess --- Transmutation of Oats, &c.

HAVING seen in the March number of the Farmer, a case of apparent transmutation of wheat to chess, which many suppose impossible on account of the difference of species, I would like to call attention to the fact of the change of oats to rye, as given by the author of Vestiges of Creation, on the authority of Dr. LINDLEY in the (London) Gardner's Chronicle for August, 1844:

"When oats sown at the usual time are kept cropped down during the summer and autumn, and allowed to remain over winter, a thin crop of rye is the harvest presented at the close of the ensuing summer. This experiment has been tried repeatedly with but one result; invariably the *secale cereal* (rye) is the crop reaped, where the *avena sativa* (oat,) a recognized different species was sown. Now it will not satisfy a strict inquirer to be told that the seeds of the rye were latent in the ground, and only superseded the dead product of the oats; for if any such fact were in the case, why should the usurping grain be always rye."

Again, in the "Sequel to the Vestiges," page 78–9, the following is related:

"In 1843 the Rev. Lord Arthur Hervey sowed a handful of oats, treated them in the manner recommended, by continually stoping the flowering stems, and the produce in 1844 was for the most part, ears of a very slender barley, having much the appearance of rye, with a little wheat, and some oats."

It is also stated as a certain fact that in orchiaceous plants, forms just as different as wheat, rye, oats, and barley have been proved by the most rigorous evidence, to be accidental variations of one common form, brought about no one knows how, but before our eyes, and rendered permanent by equally mysterious agency. Then, says reason, if they occur in these plants, why should they not also occur in corn plants? for it is not likely that such vagaries will be confined to one little group in the vegetable kingdom; it is more rational to believe them a part of a general system of creation. How can we be sure that wheat, rye, oats, and barley, are not all accidental offsets from unsuspected species? And this supposition having at least some appearances in its favor, we may safely suppose chess to be in the same class, which would account for its appearance in the case cited by your correspondent. E. S. JOHNSON.

Penfield, March, 1847.

Eagle C Plow.

SOME competent person ought to write the history of the Plow. The study of its progressive mutations and improvements from the forked limb of a tree, used by the Romans, Arabs, and Mexicans, up to the "Eagle C Plow" manufactured and sold by Messrs. NOTT & ELLIOTT of this city, would be alike interesting and instructive. The Locomotive and the Railroad furnish no stronger evidence of the developement of intellect, when compared with the strength and locomotion of the ancient wagon drawn by a cow and an ass yoked together, than is exhibited in the apparently perfect construction of the most useful implement ever placed in the hands of man.

There are several millions of acres annually plowed in this State; and a saving of one-tenth of the power of traction, by an improvement in the plow, will amount to hundreds of thousands in the pockets of New York farmers. The saving of horse and ox flesh is, however, only one item in the gain that accrues from a superior plow. The mellowing of the soil, and the killing of all pernicious weeds and plants, by covering them deep in the earth, are points in a good implement, the value of which can hardly be over-estimated.

We have seen a plow of the kind manufactured by Messrs. NOTT & ELLIOTT, go a half mile or more through the soil on the Hudson river flats between Albany and Troy, and doing fair work, with no one holding it—so perfect and easy does it run. This was at a trial of several plows by a committee of the State Agricultural Society.—The inventors of this improvement are Messrs. RUGGLES, NOURSE & MASON, Boston, who have had orders from the Emperor of Russia.—*Rochester American.*

TO GROW PEAS FREE FROM BUGS.—We are indebted to Mr. JOEL CHAFFEE, of Oswego county, for the following "remedy for buggy Peas":

"Put your peas in a vessel, and pour on sufficient boiling water to cover them. Stir them as quick as possible, for nearly a minute; then turn the peas into a basket that the water may drain off. Do this every year, and your peas will not be infested with bugs."

A Plea for the Birds.

NUMBER ONE.

I HAVE often thought, that if the affairs of earth were left to the will, or taste, of some, the world would soon be converted into a desert. Not a tree would be allowed to grow whose prospective value could not be estimated in dollars and cents, nor a bird permitted to live, that could offer a mark for the sportsman. "I love trees," said one, not long since, "but I want them in the woods where they belong;" while the parching rays of the summer's sun fell upon and around his dwelling, unmitigated by the shade of a single leaf; and the chilling blasts of winter, in turn, swept by, in all their freezing majesty. "What else are they good for?" asks another heartless piece of mortality, as he picks up the mangled object of his cruel sport.

"What else are they good for?" It is difficult to reason with one who neither sees nor acknowledges any rights but his own, nor any profits but those of the purse. "What else are they good for?" Deprive the world of its shades and its animation, and who that has the soul of a man, would not feel that it was no longer a fit residence for a social being?

"What else are they good for?" To those who are disposed to listen, I will say: It will be difficult to prove that any thing "has been made in vain." But as this may seem too general, it may be remarked, that the appropriate food of birds is seeds, berries, insects, &c. It has been calculated that a single pair of sparrows, during the time of rearing their young, consume over 2000 caterpillars in a single week. Allowing each pair of little birds to consume even half that number of insects of different kinds, and we see at once that millions of bugs, worms, moths, caterpillars, &c., are daily destroyed by the various tribes of the feathered race. Hence, whoever kills them, does an injury both to himself and to society.

Should it be said, "Few birds will eat caterpillars," it may be replied, 'caterpillars do not always remain such, but are soon transformed into moths, butterflies, &c., and who does not know the havoc made among these by the birds! We know the difficulty of raising some kinds of fruit, vegetables, and (I might add) grain too.—We know, too, that this difficulty is much greater in some seasons than in others, on account of the multiplicity of insects. How much greater would it be if none were destroyed by the birds! Again: many of them feed on seeds as well as insects. After all that they destroy or consume, the farmer often experiences great difficulty in keeping down troublesome weeds; and how much greater would be his task, if none of the seeds were consumed by the birds!

"But," says one, "they eat also our fruit and grain." Well, suppose they do; do they not pay us for it, in destroying foul seeds and insects? The truth is; we overlook the good they do, because we are not in the habit of observing, and think only of the injury, which is generally more imrginary than real; and hence, over-rated. Besides, who, that has a spark of benevolence, would grudge them a few grains, if it were only to witness the happiness they seem to enjoy? I would feed them, if I received only a song in return.

"But, what shall be said of hawks, crows, and blackbirds?" Hawks, being birds of prey, will not spare even our domestic fowls. Man has the right to protect his own; hence, he may destroy hawks in defence of his rights. The appropriate food of crows and blackbirds is bugs, worms, grubs, carion, &c. Every plowman well knows that these birds, if unmolested, will follow in the new-turned furrow and pick up the very bugs, grubs, beetles, &c., which are so destructive to our corn and potatoes. These birds, then, are really the friends of man. They are moreover, his scavengers, clearing the earth of foul, pestiferous matter, as well as of destructive insects.—It is true, the crow sometimes steals an egg, or a chicken, and perhaps a few hills of corn; but the former is merely incidental, being only occasional, and not necessarily any part of his appropriate work; and the latter can easily be prevented. It has long since become a proverb, "No crows, no corn;" and who does not know that in seasons when no crows are seen, our corn is often nearly destroyed by worms! It cannot be doubted, that the crow and the black-bird save to man ten-fold more than they destroy.

But the most bitter complaint is made against the "cherry-bird." Of this bird I know little, but I believe that, if the truth were known, even this little thief does more general good than individual injury, and that if he were left to himself, and the "cherry-man's" loss were made up to him by a tax on the public, the tiller of the soil would be profited by the arrangement.

I plead, then, for the birds. If need be, I will except birds of prey, which I leave to the disposal of those whose lot brings them into more immediate contact with them. But, for the robin, the swallow, the blue-bird, and the thousand other little warblers that come into our gardens and orchards to place themselver under our protection against birds of prey; that fill the air with the music of their notes;—for these I make my plea. "What are they good for?" If they were good for nothing, I would not betray them. I would love them for their music, for their beauty. I love to witness their little sports. I love them because they are happy, and because they show forth the benevolence of their Creator.

Fairport, March 9, 1847. H.

Good fences make good neighbors.

Disease in Grasses, &c.

Mr. Editor:—In answer to "H. H.," upon the subject of "A new Disease in Grass," I would say that, from the investigations which I have made, I have come to the conclusion that it is the effect of early springs and late frosts. After the grass has formed a joint, the center of the stalk immediately above the joint is nearly in a watery or liquid state, in which condition it is easily congealed, and the more thrifty the grass the more easily injured. By examining the stalk, two or three days after it is frozen, there will be found a small black decayed spot in the center. I have known meadows benefited by feeding the grass down in the spring, so as to keep it from forming a joint until after the heavy late frosts; but as a general thing the "cure is worse than the wound"—especially if the season comes off warm and dry. D. C. B.

Persia, N. Y., March, 1847.

Mr. Editor:—In the March number of your valuable paper, I noticed a request that some one would state the cause why the top of herds grass dies, and also sometimes the stem. From careful investigation of this subject for a number of years, I am firmly convinced that the cause is this:—A worm eats the stem, just above the upper joint. They are plain to be seen with a good microscope.

The first that I noticed of these worms was upon bent grass, some six or seven years ago, since which time they have multiplied remarkably fast. They work upon most kinds of grass, except *clover*. Some in this section have attributed this damage to frost; but it is not so.—There is a worm that works upon Johnswort, and in this section have mostly destroyed that pesty weed. These build their nests in the blossom, and by closing the petals destroy the plant.

There are two other kinds of worm that work upon Canada thistle—one in the stem and the other in the blossom—and where they both work they utterly destroy the thistle, as far as my observation has extended, which is by no means limited. There is yet another worm that works upon dock, and I most anxiously hope they will destroy it. The potato rot has, in my opinion, been caused by insects, but I have not found any thing to prevent it, still I hope to the present year.

The best thing that I ever tried to prevent the fire blight on pear trees, was to hang rusty iron on the body of the tree, and place cinders around the roots. I should be glad if individuals would take special pains to ascertain remedies to save our grasses and trees, and for you to publish the same in your valuable paper.

To destroy aphides I bore into the body of the tree and put in sulphur, and then close the hole with a plug.

I am now, and have been for some time past, the constant reader of three agricultural papers, and should be glad to see them in the hands of every farmer—for I find something valuable in them all. Solomon Hoxie.

Leonardsville, 4th month, 1847.

Diseases in Swine.---Inquiry.

Mr. Editor:—As your paper, the "Farmer," is a medium for the interchange of thought, as well as experience among farmers, I will venture to relate a little of mine the past winter, in regard to raising swine. I have practiced some fattening early pigs, as they make much sweeter eating, and I think I make my pork cheaper, than when I winter them over, as they can easily be made to weigh 300, or over, at eight or nine months old.

I have a choice blooded sow, that I have kept for breeding, which on the 20th Febuary last farrowed eleven pigs. I succeeded in raising eight for a time: after they became four or five weeks old, they began to die off strangely and suddenly, their necks swelling up, and their ears turning black or purple.

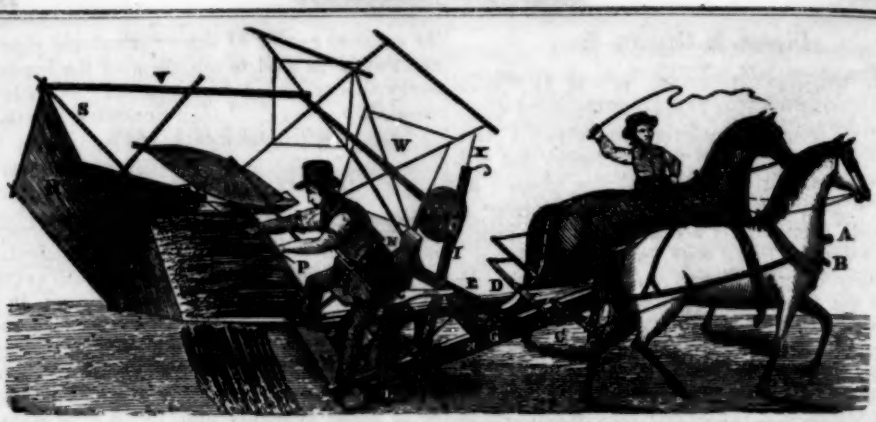
I lost all but two, and these were in the same state, with their ears turned black, when I took them immediately away from the sow, cut their ears off as far down as they were black, to start the blood, and shut them up by themselves, and have thus far succeeded in raising them. I have heard of two or three instances of the same kind. What the cause may be, or what will prevent it, I have not been able to learn, either from my own experience, or from others who have lost in the same way.

If there are any of your subscribers weo can explain the cause, or give a remedy, it would oblige me, and perhaps benefit others.

Respectfully, G. C. Sprague.

Castile, April, 1847.

Cultivation of Cranberries on Upland Soils.—The attention of the public having been called to the culture of this delicious fruit, and Mr. Gardner, of Massachusetts, having produced three hundred and twenty bushels to the acre, on upland soil; I proceed to give his mode of cultivation as follows: "I select a piece of cold wet land that will keep moist through the year—remove the top soil to the depth of two inches; this prevents all grass or weeds from growing, and the plant will require no cultivation after they are set out. After the top was removed, I harrowed the ground smooth and marked it out in drills, eighteen inches apart. Some I set out on sods fourteen inches square, placed in holes a little below the surface. They all flourished far beyond my expectation: the first year they put forth runners three feet long, and every vine was loaded with fruit. The plants can be set out from September to December, and from April to the last of June."—*B. G. Boswell in Farmer's Cab.*



McCormick's Patent Reaper --- Improved.

HARVEST TIME is fast approaching, with a prospect of unusually high prices for grain.—This consideration (and the fact that the FARMER has now nearly double the number of readers than it had when we formerly noticed the machine,) induces us to again call attention to *McCormick's Reaper*. We are informed that Mr. McCORMICK has made such improvements in the Reaper as are found to greatly facilitate its operation—especially in the work of raking the cut grain from the platform. In a conversation with Mr. McC., a few weeks since, he informed us that he was manufacturing a large number of Reapers at Cincinnati, to supply the southwestern country. He stated that the machines were being constructed in a superior manner, so that no fault should hereafter exist in that particular. The Reaper is also manufactured and sold by Messrs. SEYMOUR & Co., and BACKUS, FITCH & Co., of Brockport, in this county—and by H. E. SMITH, of Fowlersville, Livingston Co., N. Y. We are informed that it is also manufactured at Chicago, Illinois, where our western friends can probably obtain the machine—but we are unable to give name of the manufactur at that place.

An examination of this Reaper, and the reliable testimonials we have seen from those who have thoroughly tested it, convince us that it will do good work in the hands of persons who understand ordinary machinery. We see by his advertisement, in the Cincinnati papers, that Mr. McC. offers the Reaper upon such terms that the purchaser has nothing to risk in making a trial of it. He sells it upon the condition that "it will cut one and a-half acres of wheat (or other small grain) per hour; that it will save an average of a bushel of wheat to the acre that would be lost by ordinary cradling; that it is well made, of good material, and durable, with proper care; and that the raking can be well done by a man riding upon it. If, upon a fair trial, the Reaper cannot perform as above specified," it is not to be kept or paid for. [The purchaser to pay $20 down, and $100 on the 1st day of November next, providing the Reaper performs as above—if not, to deliver safely when called upon, &c.]

A figure of the Reaper, as improved, is given above. Further information can be obtained from Mr. McCORMICK or either of the manufacturers. We give this notice for the information of grain-growing farmers, and in answer to inquiries recently received—without the knowledge or solicitation of any one interested in the manufacture or sale of the Reaper. M.

A GOOD CORN CULTIVATOR is considered indispensable by many farmers—and now that the demand for corn promises a good return for the expense of the crop, growers can well afford to purchase proper implements to aid in its culture. While examining, a few days since, various implements at the Plow Factory of our friend P. D. WRIGHT, (119 State st., in this city,) we noticed a Corn Cultivator of his invention and manufacture which appeared to be an excellent article. It is called the *Double-pointed spring-tooth Cultivator*, and is neat, cheap and durable.

Mr. W. exhibited the above Cultivator at our last County Fair, and was awarded the first premium. He also received the first premium on Plows, (for a Cayuga County Plow of his own manufacture.) We mention these matters for the information of farmers, and in justice to our worthy and modest friend WRIGHT. M.

AGRICULTURAL IMPLEMENTS.—It will be seen by reference to our advertising department that the Rochester Agricultural Ware-houses are well supplied with Farming Implements, Tools, &c. We observe that Messrs. RAPALJE & BRIGGS, of the Genesee Seed Store and Ag. Ware house, have just received an extensive assortment of well made Plows, and a large variety of other seasonable implements. M.

Hints for June.

If your corn and potatoe planting is not finished, complete it immediately, as the unfavorable appearance of wheat and prospect of good prices renders it an important crop. Finish garden planting, beans, cucumbers, &c. Plant mangle wurtzels, or sugar beets for stock, the first week in this month, if not already done. Carrots should have been sown before, but will now answer if sown immediately. Ruta bagas may be sown from the 10th to 20th; if sown too early, they "neck up" and are woody.

Slather on the manure on all the hoed crops, if you have it; if not, buy of your improvident neighbor. It is the true philosopher's stone—turning all it touches to gold. Make up your compost heaps for summer fallows, with all the overplus and coarse straw and stalk manure; but use no lime, as it disinfects and disengages all the gasses of decomposition. Plaster and ashes are the thing; swamp and ditch mud, sods, urine, and water. Lime is beneficial to dry inert and over-rotted vegetable substances, used with them only.

"A bad May makes poor hay." Take care of overplus hay, as the present prospect in this region is unfavorable for even an average crop. Cut your clover hay early; and as soon as wilted in the sun, cock it and let it sweat from 2 to 4 days. Open to one hour's sun, and it is fit for the mow—the real pow-shong hyson—this is the only way to do it right.

Weed your wheat fields of cockle, and if not too abundant, of red root, &c., so that you may get the great prices that wheat will open at after harvest. Look out for about 12 shillings, or a *leetle* more.

Clean your orchards of every worm's nest; and, if necessary, take a missionary tour to your lax neighbor's orchard; for it is not only an act of charity, but of self defence.

Do up your high-way work honestly and faithfully, as you would your own—and don't be particular about hours and minutes. Go to election on the 7th inst., in this state; and don't let politics, printed tickets, nor the humbug of party discipline, influence your vote for judicial officers. Let the question be, "*Is he honest, is he capable; is he the best man to judge the land between rich and poor, high and low, innocent or criminal, man and man?*" Do all this, dear reader, and you can sleep o' nights, and defy the night-mare and hypocondria.

Choice Neat Stock for Sale.—The reader's attention is invited to the advertisement of Mr. Sherwood, of Auburn, late President of the State Agricultural Society. Mr. S. has one of the largest and best collections of thorough bred Durhams in the State. The opportunity to purchase is well worthy the attention of breeders.

To Correspondents.

During the past month communications have been received from Alfred Marsh, Solomon Hoxie, Chas. H. Randall, Apis, A Subscriber, S. W. Jewett, J. Chaffee, Agricola, D. Lewis, A. H., J. C., Farmer Tim, Inquirer, and I. S.

ANSWERS TO CORRESPONDENTS.

We have got so far in the rear in our attentions to obliging friends, and communications have so accumulated, that we hardly know where to begin—in fact we are all but *swamped*. B. P., J. D. C., A. R., A Farmer, L. Manly, J. L. R., W. S., O. P. Q., Cosmopolite, Plow Jogger, &c., are on file for publication. Further notices next month.

D. W. H., *Clifford, Pa.*, is referred to "Morell's Sheep Husbandry," a work that no wool grower should be without. The disease of grub in the head is a fatal one, and preventives are the only safety.

C. M., *Plymouth.* Your desire has been complied with. Corn ground with the cob is better food for all animals, except the fattening hog, than when ground alone. Corn meal alone is too heavy feed, and requires something besides mere nutriment to distend the stomach and render the food pervious to the gastric juice, and give irratability and action to the nervous organization.

Our opinion is that timber, for durability, should be cut at about that period when the leaf has arrived at its full size, as the gum, saccharine matter, &c., is then entirely exhausted.

Early in the spring, before the buds or sap have moved, is the best time to set the peach, cherry, &c. Apples, pears, and the hard-wooded trees, in autumn.

H. J., *Holland, N. Y.* We know of no way to kill the willow by cutting, if located in wet ground, except extirpation root and branch.—Most other wood is destroyed by cutting at that period, say August, when it is too late to start new buds for the future growth, and yet while the weather is warm enough to ferment and sour the sap, and destroy vitality.

M. B., *Romulus, N. Y.* "Youatt's Cattle Doctor" will give the information required.

Analysis of Soil.—The gentleman of West Bloomfield, who left with us specimens of soil from Oswego county for analysis, is informed that at the time of the making up of this number of the Farmer the analysis was not completed. We shall endeavor to give him a full account of its constituents and capabilities, either by letter or through this journal in its July number.

A good word is an easy obligation; but not to speak ill, requires only our silence, and costs us nothing.

New York State Agricultural Society.

List of Premiums for 1847.

[*Continued from page* 119.]

Winter Meeting.

For the best new seedling variety of winter apples, of decidedly superior quality and valuable for exportation; one dozen specimens to be exhibited; together with a history of its origin; a description of the growth, character, and habits of the tree, and the growing of the fruit—such fruit to be adjudged by the committee as of the first character for orchard purposes, ...Downing's book, colored plates.
For the second best do.,.....$5 and Down. com. edition.

The above new seedling variety to be sent to B. P. Johnson, Secretary, Agricultural Rooms, Albany, before the 15th of January, 1848, for examination.

For the best new fall seedling apple for all purposes, conditions and descriptions as above,..$5 and Down. com. ed.
Second best,..... 2 do.

These last named to be exhibited at the Annual Fair and Show of the Society in 1848.

Resolved, That a committee of —— be appointed by the Executive Committee, who shall report at the next annual meeting a list of not exceeding 30 kinds of apples, which shall be in their opinion best adapted to the economical demands of the people of this state, and to be best suited to the different localities of the same, comprising their most extensive use in all seasons, for home consumption, and for exportation, the individual names of said fruits, a drawing of each separate kind, with a particular description thereof; and that in this connection they also take into consideration the several classes of fine fruits as adapted to the above purposes, and —— dollars be appropriated as in the judgment of the Executive Committee shall be necessary to accomplish this object.

Committee.—Lewis F. Allen, Black Rock; A. J. Downing, Newburgh; Hon. Samuel Young, Ballston; Dr. H. Wendell, Albany; and J. W. Bissell, Rochester.

DISCRETIONARY PREMIUMS,

will be awarded for articles of merit exhibited by *mechanics*, in all the various branches—and it is hoped that a general exhibition will be made.

Plate will be substituted for money premiums in all cases at the option of competitor.

FIELD CROPS.—At Winter Meeting.

Best crop of wheat raised upon any farm, not less than two acres, to be harvested, threshed, and measured,.....$15
Second best,.....$10 | Third best,.....Vol. Trans.
Best crop of spring wheat, not less than two acres, to be harvested, &c.,.....$10
Second best,.....$8 | Third best,.....Vol. Trans.
Best crop of Indian corn, not less than 2 acres, to be gathered, shelled, and weighed, between the 20th December and 5th January,.....$20
Second best,.....$15 | Third best,.....$8
Best crop of barley, not less than 2 acres, to be harvested, &c,.....$10
Second best,.....$8 | Third best.....Vol. Trans.
Best crop of rye, 2 acres,.....$8
Second best,.....$5 | Third best,.....Vol. Trans.
Best crop of oats, 2 acres, &c.....$10
Second best,.....$8 | Third best,.....Vol. Trans.
Best crop of potatoes, not less than one acre, to be dug and measured, of a good table quality.....$10
Second best,.....$8 | Third best,.....Trans.
Best crop of potatoes, as to quantity, not less than 1 acre, $10
Second best,.....$8 | Third best.....Trans.
Best crop of ruta baga, not less than 1 acre, to be weighed, and 50 lbs. estimated as a bushel,.....$10
Second best,.....$8 | Third best.....Trans.
Best crop of sugar beets, not less than half an acre, weight as above,.....$8
Second best,.....$5 | Third best,.....Trans.
Best crop carrots, half an acre,.....$8
Second best,.....$5 | Third best,.....Trans.
Best crop mangel wurtzel, half an acre,.....$8
Second best,.....$5 | Third best,.....Trans.
Best crop of peas, 1 acre,.....$8
Second best,.....$5 | Third best,.....Trans.
Best crop of beans, not less than 1 acre,.....$8
Second best,.....$5 | Third best,.....Trans.
Best acre of corn fodder, with a particular account of manner of cultivation and securing the crop,.....$10
Best half acre of hops, with a full account of method of cultivating and preparing crop for market,.....$10
Best half acre of flax, with like statements as above,.... 5
Best half acre of tobacco, do. do. 5
Best acre of broom corn, do. do. 5
Best acre of clover seed, do. do. 5
Best acre of timothy seed, do. do. 5

EXPERIMENTS.

Whereas, The Agricultural Society of the State of New York has not an experimental farm, and whereas, to some extent, satisfactory experiments can be made by intelligent farmers on their own farms, therefore

Resolved, That the undermentioned list of premiums be offered to induce public spirited individuals to lend their valuable aid in extending the boundaries of accurate rural knowledge.

Three premiums will be awarded of $30, $20, and $10, in January, 1848, for the best experiment upon a herd of not less than 8 cows, to determine the relative advantages of soiling, or depasturing milch cows. The experiment to be conducted as follows:—

1st. The experiment must commence on the first day of May, and be continued until the first day of November.

2d. The cows to be divided in two lots of four each. One lot to be soiled, the other depastured. Before commencing the experiment, each lot must be weighed and the record of the weight returned to the committee. It is necessary that the two lots shall be as near alike in weight and milking properties as possible.

3d. The milk of each lot to be weighed separate daily.

4th. The manure made from those soiled to be ascertained in cords.

5th. An account to be kept of the expense of soiling, also detailed statements of the entire management, together with the measurement of the land occupied in soiling, and each to be returned to the committee.

6th. A description and measurement of the land occupied for pasture, also to be made.

7th. Each lot to be weighed at the conclusion of the experiment.

For the best experiment to be continued through three crops, to ascertain in bushels of grain and weight of stalks or straw, the actual value of manure to a farmer. The experiments to be conducted as follows, viz:—

1st. Three contiguous acres of ground shall be selected.

2d. One acre of which shall be manured with not more than ten cords of common barn yard manure the first year, and plowed under. The second acre to be manured with fermented or composted manure, to be applied in any manner the experimenter chooses; but a full account of the mode of making the compost, and the manner of its application, accompanied with a statement of the cost of making, and application, will be required.

3d. The three acres are to be planted with corn the first year, the second to be sowed with barley or oats: the third crop to be winter grain: an accurate account of the yield of each crop to be kept.

4th. A full account of the whole management and all the details respecting the culture and the circumstances affecting the crop.

5th. The several kinds of soil to be particularly described and specimens transmitted to the State Society for analysis before commencing the experiment—and also at the conclusion of the experiment—discriminating carefully between each acre.

For the best,..$40 | Second best,..$30 | Third best,..$20

N. B. The specimens of soil to be selected for analysis must be taken from the surface, in different parts of the acre. Where the acre is green sward, the sample must be taken just at the termination of the roots of the grass. Specimens should also be selected from the depth of seven or eight inches. At all events, immediately below the usual depth which the plow runs. The specimens of soil must in no case be mixed; and should consist of about 1 pound sewed in a cotton bag.

$20 will be paid at the annual meeting of the society in 1848, to the person who will make the most satisfactory agricultural experiment, accuracy and the importance of the experiment to be taken into consideration. A full detail of the experiment and its results must accompany the application.

For the best managed entire flock of sheep of not less than 100, to be awarded at the annual meeting in 1848,...$30
Second best,.....$20 | Third best,.....$10

The applicants for these premiums will be required to furnish the Society with the following information, viz:—

1st. The kind and quantity of food, and its value.

2d. The quantity and quality of wool—this to be determined by its being submitted to the stapling of some respectable manufacturing establishment, whose certificate shall accompany the application for the premium.

3d. The number of the increase.

4th. Kind of sheep, and the number of ewes, wethers, and bucks.

5th. The value of sheep when fattened, and the value of lambs for the butcher.

Competition from persons not residents of the State.

Premiums of Plate, Medals, and Diplomas, will be awarded on—

The best bull of any breed, 3 years old.
" " 2 "
On the best cow, 3 years old.
" heifer, 2 "
" " 1 year old.
" yoke of working oxen.
" pair fat cattle.
" stallion.
" brood mare.
" pair matched horses.
" buck, long or middle wooled.
" " fine wool.
" pen of Merino and Saxony ewes, not less than 5 each.

B. P. Johnson, Sec'y.

Any information desired by persons who intend to compete for premiums, will be furnished by the Secretary, on application, and he solicits free and full inquiries from all who are desirous of competing at the Fair, or of presenting articles for exhibition.

To Wool Growers.

Numerous liberal minded persons, interested in the wool business, having placed funds at our disposal for the purpose hereinafter mentioned, we shall, on the first day of October next, award and pay the following premiums, viz:

Ten gold medals, worth ten dollars each, for the ten entire clips of most valuable fleeces for clothing purposes.

Ten gold medals, worth ten dollars each, for the ten entire clips of most valuable fleeces for combing or worsted purposes.

Ten premiums, of ten dollars each, for the ten best conditioned entire clips of Saxony wool.

Ten premiums, of same amount, for the ten best conditioned entire clips of Merino wool.

Ten premiums, of same amount, for the ten best conditioned entire clips of Merino grade wool.

Ten premiums, of same amount, for the ten best conditioned entire clips for combing fleeces.

All wool growers throughout the United States are invited to compete for them.

All bales of wool designed for our care should have the name of the owner or grower plainly written or printed on them in full, together with our address, as follows: Perkins & Brown, *Springfield, Mass.*

All lots of wool intended to compete for the premiums, should reach us by the first of August next. Growers may receive premiums, if their wool be put up and marked separately, even though their wool come through the merchant or other wool dealer. Any farther contributions from wool growers, or other public spirited persons, will be expended in preparing the medals, publishing a report, and in additional premiums. All editors of periodicals throughout the United States, friendly to agricultural pursuits, are respectfully requested to publish.

Perkins & Brown.

Springfield, Mass., April, 1847.

Large Premium for a Single Fleece.

To all enterprising Wool Growers throughout the United States, very respectfully:—Being desirous of improving my stock of sheep, and anxious to not diminish while the quantity while improving the quality of the wool; and consequently wishing to ascertain where the really greatest producers of fine wool can be found, I cordially invite your attention to the following notice: I will deposit at the wool depot of Perkins & Brown, at Springfield, Massachusetts, a fleece of wool of *one year's growth*, to be shorn from a *two year old ram*, and with it fifty dollars, to be awarded as a premium to any wool grower who will send to said depot, by or before the first of ninth month (September) next, a fleece *positively of one year's growth*, shorn from a *two year old ram*, which shall equal the one deposited by myself in quality, and exceed it in quantity *four ounces net wool*. The amount of net wool to be ascertained by being submitted to the cleansing process by such manufacturer as the conductors of the depot shall agree with, and a list of the names of the competitors published, with the weights of their respective fleeces in net wool annexed.

Wm. H. Ladd.

Richmond, Jefferson Co., O., 5th Mo., 11, '47.

P. S. The excess required should not have been more than one ounce, had not the fleece been materially diminished by cutting samples. Should there be more than one entitled to the premium, by fulfilling the foregoing provisions, the premium will be awarded to the competitor whose fleece (other things being equal) exceeds by the greatest quantity. W. H. L.

Transportation of Cattle and Sheep on Railroads.—The Railroad Journal gives the following important information derived from statistics of cattle and sheep sent to and consumed in the London market, with the former loss in driving now saved by the adoption of railway conveyance:

"It appears that the average loss of flesh in driving cattle to London market, for a distance equal to the railroad conveyance noticed, is 40 pounds each. The number conveyed was 220,000, and the consequent saving of flesh 8,800,000 lbs. The average loss of driving sheep as compared with railway conveyance, is 8 pounds each, equaling 10,000,000 lbs. of flesh, which at 8 cents per pound would amount to $1,504,000. The *time* saved is more than equal to the freight.

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

The Season---Fruit Crops, Hints, &c.

THE past winter, in this region, was unusually severe on everything tender. Raspberries and strawberries have suffered seriously, and the crops of both will consequently be comparatively small. The hardy fruits, however, look well, and promise now (May 20th) a fine crop. Up to the second week in May vegetation could hardly be said to have made any advance. All at once the weather became as warm as midsummer, and caused such a rapid developement of foliage and flowers as we do not remember to have witnessed. It seems to have brought everything forward at once. Peaches, cherries, plums, apples, pears, and all other fruits, are in full blossom at the same time. So with ornamental trees and shrubs; many of them are forced out of their regular order of succession. Apricots are setting finely, and if their mortal foe, the *curculio*, is guarded off, and no untimely frost comes to blast them, there will be a fine crop.

We are just now suffering an unprecedented drouth for this season of the year. A continuance of it will we fear, injure the setting of fruits now in bloom. Newly transplanted trees will also suffer much where *mulching* has not been attended to—that is, covering the ground around the tree with two or three inches deep of litter or rough manure. In extreme cases watering should be resorted to. This is only properly done by removing a couple of inches of the soil, and giving a plentiful supply to reach the roots, and then replace it. Throwing water on the surface is more detrimental than useful.

Dahlias may be planted out from the first to the middle, or even last of the month, for a fine autumn show of flowers. They will flourish in any good soil where corn or potatoes will grow. The soil is not unfrequently made too rich for them, so that they produce leaves and stems, but few flowers. Young plants, propagated from cuttings this spring, if strong and well rooted, will produce a much better bloom than old roots. They are sold by the nurserymen in pots, and can be turned out without breaking the balls or disturbing the roots; in six weeks or so they will be in blossom. Neat stakes should be provided to tie them to as they grow, and surplus side shoots should be shortened or cut off. The ground should be kept clean and mellow around them.

The varieties now cultivated are almost innumerable. The great point with people generally is not *novelty*, but to get free bloomers, and good colors and forms. Among those we noted last season, as particularly so, we may mention—*self colored* varieties: Anna Minerva, Andrew Hofer, Burnam Hero, Blue Bonnet, Conservative, Cleopatra, Emma Noke, Eximia, Henry Clay, Horace Binney, Lady Harland, Model Marillo, Miss Percival, Matchless, Mary, Marshal Soult, Prince of Wales (Girling & Dodds',) Queen (Widnall's,) Sphere, Topaz, Washington Irving, Sir E. Antrobus. *Fancy* or variegated, spotted and tipped varieties: Beauty of Wakefield, Charles XII, England's Defiance, Fairy Queen, Harleqtin, Illuminator, Lady Sale, Marchioness of Ormonde, Madam Bavais, Madam Wallner, Madam Villabois, Novelty, Sylph, Victor, Viscount Ressequier, Donna Antoni, Eugenia, Cinderella. All these we know to be superb. The following are very highly praised new ones, rare and rather high priced yet: Indispensible White, La Lione, Spitfire, La Vogue, Butterfly, Beeswing, Alkoenig, Oakley's Surprise, Ithuriel, Isis, Keyne's Duke of York, Merveille, &c.

The Dahlia is one of the leading favorites of Florists at the present time. Thousands upon thousands of pounds are annually expended in England and the continent of Europe, for new, curious varieties—and not a little is expended for the same purpose here at home. Plain as we are in our tastes, we are not insensible to the attractions of novelty and beauty—hence the European florists find a good market here for their new and curious productions.

We have seen it stated that the Horticultural Society of Edinburgh (Scotland,) has offered a prize of £1,000 for a blue flowered Dahlia, (this has always been considered an impossibility—we do not see why,) and that the Horticultural Society of Dublin (Ireland,) has since offered double that sum—£2,000! We hope this is not so; but if it be, it need surprise no one. Although every twentieth human being in the land is on the point of starving, for *want of food*, they can pay just as well as not £2,000 for a *novelty*—a *blue Dahlia*. Ireland has for ages been an anomaly, and at the present moment is the greatest the world ever saw. How long she is destined to remain so, GOD knows. Only think that, in a country where Agriculture, Horticulture, and all the industrial arts are in a lower state than in any other civilized country on the earth—where, but for *charity*, the whole working population would be swept off with hunger, *because the potato crop is a failure*—in that country, 10,000 dollars are

offered as a prize for an insignificant floral novelty! *True taste, sensible zeal,* and every human feeling is outraged by such idiocy.

Insects.—Give regular attention to the destruction of the Curculio and other insects. Rub off shoots on the stocks of your recently grafted trees. Tie up weak grafts, buds, and such trees as are inclined to grow crooked.

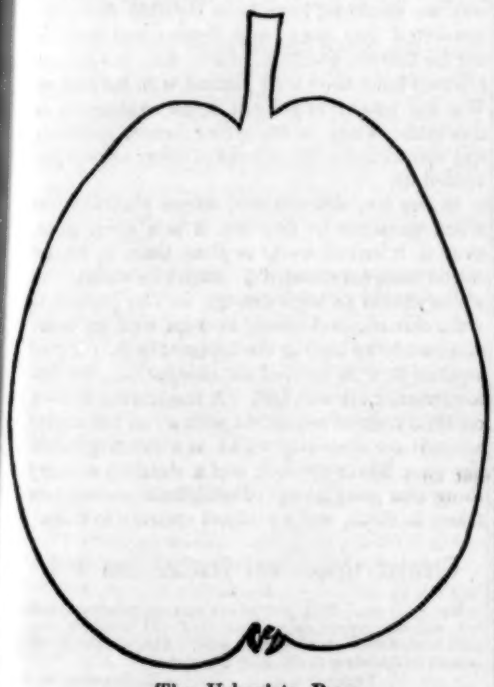
Thin the fruit on your trees that may be overloaded—particularly on dwarf pears. Shorten or remove branches where necessary to preserve, or improve the form and balance of the tree.

Keep the ground well hoed around all young trees. Never let the weeds or grass get ahead. This must be observed in every department of gardening.

Flower beds should be stirred once a week, at least, with the rake. This will save much labor in weeding and hoeing.

Box and grass edgings should be kept neat.—Lawns should be frequently mowed, and kept clear of docks, dandelions, and all other weeds. These should be cut below the crown as soon as they appear.

Don't forget successive plantings of peas, salads, and other vegetables. We have no space for detail.



The Urbaniste Pear.

This excellent pear deserves a prominent place in all choice collections; and although it has been figured and described in *Hovey's Magazine, Downing's Fruit and Fruit Trees,* and *Manning's Book of Fruits,* yet we are sure but few of our readers have become acquainted with it. Its size, delicious flavor, and the hardiness and thriftiness of the tree, are recommendations of no trifling consideration. We copy the following notice from the Gardner's Chronicle, of a recent date, by Mr. Thompson:

This originated in the garden of the Comte de Coloma, whence it was obtained by Dr. Van Mons in 1800, and must be ranked amongst the first-rate Belgian Pears. It is one of those cultivated in some collections as the Beurre Spence, the name which Dr. Van Mons gave in reply to the question, "which is the best of all Pears?" The Beurre Diel, Beurre de Capiaumon, and others of less merit, have also been received as the Beurre Spence; but all endeavors to find a distinct variety answering the above character have been hitherto unsuccessful. The Urbaniste, however, can scarcely be excelled when obtained in its highest perfection.

The flesh is white, exceedingly smooth, melting, sugary, and delicious. In perfection in October. The tree is healthy and vigorous, adapted for a standard, dwarf, or espalier, on either of which the fruit is much higher flavored than from a wall. Shoots olive-colored, with few pale grey, somewhat linear specks. Leaves middle-sized, oval, acuminate; finely serrated; petioles long and rather slender; stipules linear. Flowers scarcely middle-sized, resembling those of the White Doyenne; petals oval, tapering to the claw, not touching each other when fully expanded.

Grown as a standard, the shoots acquire a wavy mode of growth, somewhat like that of the Aston Town. A proper regularity must therefore be maintained by means of the knife. It is very distinct from the White Doyenne, or old White Beurre, and yet there are many traces of resemblance which would lead one to believe that it is a descendent from that esteemed variety. The American writers state that their old favorite the Doyenne is more nearly approached by the Urbaniste, than by any other European Pear.

Mr. Downing says—

The Urbaniste is a fruit for which we confidently predict the highest popularity in this country. In its delicious flavor it compares, perhaps, more nearly with the favorite old Doyenne or Virgalieu, than any other fruit, and adds, when in perfection, a delicate perfume, peculiarly its own. Its handsome size and appearance, and remarkably healthy habit, commend it for those districts where, from neglect or bad soil, the Doyenne does not flourish. The tree is a moderately vigorous grower, and though it does not begin to bear so early as some of the new varieties, it yields abundant and regular crops, and gives every indication of a long-lived, hardy variety. For the orchard or garden in the middle states, therefore, we consider it indispensable.

To Correspondents.

A. H., *Meadville, Pa.* We are much obliged for the scions and specimens of fruit sent. The names are correct.—No. 1, *Yellow Newtown Pippin.* No. 2, Roman Stem, an excellent apple in New Jersey, where we have seen it much. We have not had it bear in this section yet; we have a specimen tree that may bear this season. Nos. 3 and 4 are Rhode Island Greening—no difference but what may often be observed in specimens produced on different sides of the same tree. No. 5, the Seek-no-farther of this section; a very fine apple, usually called the Connecticut Seek-no-farther.

The season was too far advanced to send the scions requested, as they had not been cut previously.

J. C., *Yates, N. Y.* We shall publish, and reply to your "queries" as fully as practicable next month. Your letter was late being received, and you know what a busy month May is with us. So you will indulge a little. We hope to hear from you often.

I. S., *Fayette, N. Y.* Your apple is too dry and tasteless. In our opinion it would be worthless if it would keep for seven years.

J. H. Watts, Esq. We are much obliged for your splendid basket of apples—Northern Spy, Red Cheek Pippin, Cooper's Market Apple, &c. They are the finest we have ever seen at this season of the year.

Plants for Flower Beds and Borders.

In another article in this paper we have recommended, for small gardens, such plants as bloom all the season and are of early culture.—The chief of these are the everblooming roses, such as the Bengal, Bourbon, Noisette, Hybrid, Perpetual, Tea-scented, &c., and Verbenas and Petunias.

No flowers so amply repay the care bestowed on them as these. If planted out now, they will bloom profusely till the frosts of next autumn.—Those who may not have a stock on hand can be supplied at the nurseries, very cheap, by the dozen or half dozen, as there is generally a good supply at this season. They can be turned out of the pots, as recommended for Dahlias.—Young plants can be propagated during summer for next year—roses from cuttings and layers; verbenas and petunias from cuttings, layers or seed. In planting in masses the various colors should be so mingled that each may appear to the best advantage. The attention given to the two latter tribes of late has added to them a thousand new charms by multiplying, to an almost unlimited extent, their colors and habits of growth. No other plants endure so well our hot and dry summers. In the "dog days," when everything is parched and shrivelled, they seem to be in the very acme of perfection. Give us Verbenas, Petunias, Portulaccas, and Perpetual Roses, and we will have a gay parterre throughout the season, if deprived of all else.

It makes us shudder to think of the miseries we have seen some people endure in the vain attempt to keep up a succession of flowers, with a few delicate short lived annuals, on a very dry and ill managed soil. We admire annual flowers, and wish to see them cultivated, but only when *well* done. This can only be where the proper requisites are at hand—a deep, rich, mellow soil, unincumbered with coarse shrubs or plants—a hot-bed to forward the finer half-hardy species—plenty of leisure, to give them all proper attention, such as tying up, training, watering, &c. Where these appliances are not at hand the culture of annuals proves but a very unsatisfactory affair, and in such cases we would direct attention to those requiring less delicate and complicated treatment. The present season threatens to be highly unfavorable for the culture of annuals in the open ground, owing to the prolonged early drouth.

Laying out and Planting Front Gardens.

While on one hand we are delighted with the increased attention given to the embellishment of door-yards and grounds around dwellings in the country, we are, on the other, pained at the almost general and entire absence or exercise of correct taste or ordinary skill in conducting the operations. For instance, Miss A. wishes to have the plot of ground, say 20, 50, or 100 feet square, in front of the house, *improved* and *ornamented*. (The ladies, to their credit, generally move first in these matters.) She has it all spaded up and thrown into mounds, ridges, and all sorts of fanciful embankments—some of them high enough to serve our soldiers in Mexico for a defence—many looking precisely like graves in a cemetery, and, all in all, suggestive of any thing but symmetry or beauty. These errors however are quite pardonable; and we do not speak of them to ridicule them, or find fault, but if possible to set taste and opinion against them.

A piece of good green lawn in front of, or around a dwelling, is far preferable to this—looks infinitely more tasteful and beautiful and costs less. Ornamental trees and shrubs, judiciously selected, may be planted promiscuously over it, singly or in clumps, as the situation and dimensions require.

Choice flowering plants, such as perpetual roses, verbenas, petunias, &c, that bloom most of the season, can be grown in masses or beds cut in the lawn—not raised into mounds or ridges, or, if raised at all, only in the centre, and that not over 2 or 3 inches above the level of the surrounding lawn. At our request several small places that we saw this spring, disfigured in the way we allude to, have been levelled down, and converted into lawn, and figures and beds cut out for flowering shrubs, plants, &c., and the proprietors have been well pleased with the change. We did intend to present some suggestions on this matter early in the spring, before gardening had commenced, but a press of other matters prevented us.

In our hot, dry climate, where plants require much moisture to flourish, it is a great error, even if it looked well, to plant them in narrow raised beds, surrounded by ditch like walks. All walks should be wide enough for two persons to walk abreast, and should be kept well gravelled and nearly as high as the adjacent beds. A good verdant turf is, beyond all comparison, the best to surround a flower bed. A few starved flowers, on little beds of red earth, with a bad box edging and narrow deep clay walks, is a downright slander on a flower garden, and a violation of every thing like good taste. There is no comfort to be taken in them, and we object entirely to them.

Growing Grapes and Peaches from Seed.

Mr. Editor:—Will you please state in your next number, whether grapes raised from seed will be of the same kind as that which produced the seed. Also whether peaches will be the same raised from the stone.

Yours, &c., A Subscriber.

Parma, May, 1847.

Remarks.—There is no degree of certainty that seeds of the improved *varieties* of either will reproduce the same. A *distinct species*, in its wild, unaltered state, will. The moment a species is removed from the natural state, by culti-

vation, it becomes a *variety;* and its seeds, if productive, will yield varieties only—some bearing a nearer, and others a more remote, resemblance to the parent. For instance, you plant seeds of an *Isabella Grape*, which is but slightly removed from the natural state, and from an hundred seedlings you will most likely not get one *identical Isabella;* and in like manner you may plant a bushel of stones of the *Early York Peach*, and the probability is you will not obtain a single tree that will produce the real Early York: and so on through the whole catalogue of our cultivated fruits—some being more and some being less disposed to vary. This fact is full of interest to the fruit grower, as it opens an immense field for interesting experiment, and vast and valuable improvements. To it we owe very many of the most delicious fruits now known.—Nearly all our American varieties, such as the Seckel, the Dix, Dearborn's Seedling, Bloodgood, Swan's Orange, Oswego Beurre, and other pears, unsurpassed by any in the world, have sprung up accidentally from seeds of other varieties in no way, perhaps, similar to them. So is it with our Spitzemburg, Swaar, Newtown Pippin, Northern Spy, and other apples—the Washington, Columbia, Lawrence, and other plums—that certainly are entitled to the first rank among the improved fruits of the present day.

Van Mons the great Belgian pomologist, based his whole life long efforts towards the amelioration of fruits on this tendency of seminal varieties to change. By following it up with unexampled perseverance, and the utmost scientific accuracy, he succeeded in giving to the world such a variety of delicious *Beurres* that it is no longer an easy matter, barely possible, to make a choice amongst them.

Thus we see what benefits have been and are yet to be derived from this law of vegetable life, and yet how many have blindly regretted its existence! How many *now*, even, in this enlightened day, had rather it were possible to reproduce their favorite fruits from seed, than that such an unlimited field for *progress* should be kindly left open to them by Providence.

Enormous Grape Vine.

A CORRESPONDENT of the Horticulturist gives an account of a grape vine of extraordinary size, growing at Burlington, N. J. The following are its dimensions: "At three feet from the ground it measures six feet one inch around the trunk, and at ten feet high it is positively three feet in circumference. It is a native male grape, and has been the wonder of the neighborhood as long back as the memory of man reaches. It is still healthy, and its giant folds run over and cover four trees, one of which is a full sized white oak, and the others are quite large. This vine grows on upland near a springy soil, its roots no doubt penetrating to the water." The writer adds—"may this not teach us a lesson, to give the rootlets, wherever it is possible, access to a spring or running water."

It is a pity that Mr. BROWN had not given a history and description of this ancient, noble vine in his "Trees of America." Such an object is more worthy of being chronicled than a memorable battle field, or mouldering ruins of castles or cities.

Orchards.

I WISH to make a few brief remarks in answer to a Syracuse cor espondent.

In rearing an orchard, the ground should be plowed deep and be in a high state of cultivation. Then set out the trees and keep the grass dug up in a circle about 4 feet from the trunk of each tree, for 4 or 5 years, but no manure after the 3d or 4th year. When the trees are large enough to bear, let the grass sward over under the trees, and keep the ground for mowing; for if the ground is kept rich with manure and sometimes plowed, the trees will grow rapidly and yield but little fruit. This was the mode pursued by my near neighbor, DAN BRADLEY, Esq. His trees grew rapidly and bore but little fruit. He knew not what was the cause. He resorted to the *Genesee Farmer* for information, and was told to stop manuring and digging about his trees, and turn his lot to meadow. He did so, and his trees soon began to bear fruit.

[Manuring and working the ground around fruit trees may be carried so far as to keep up a continual production of wood, without fruit. But errors of an opposite kind are more frequently committed. For one tree surfeited with aliment there are a hundred, in this country, declining and perishing for want of a proper supply. Trees inclined to an overproduction of wood, may be turned to fruiting by a shortening of the branches, during the summer.—EDITOR.]

We can see trees in poorish land that bear well. An old orchard sometimes becomes unthrifty, and the fruit small; then resort to manuring and plowing.

PLUM TREES may be raisd free from black knots by keeping the ground rich and well hoed, and spreading on leached ashes; and, two or three times each summer, put salt on the ground, about a pint to each square rod. By this process mine are doing well.

PEACH TREES.—Examine your peach trees three or four times each summer, at the roots of the trees; and if the gum oozes out you will find a white worm eating the bark, and sometimes deeper, which will destroy the trees: if not extracted the tree will turn yellow and die in mid-summer.

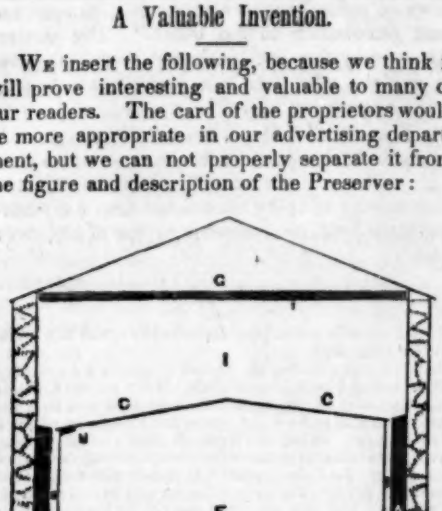
AILANTUS TREE.—I have a few Ailantus trees, or tree of Heaven. On examining them this spring I find they are winter-killed, more or less, where the stems separated from the body. The leaves grew until the frost killed them, and when they fell off, the body had not time to harden before cold weather. But I think I have in part found a remedy. Last September I commenced pruning off the leaves of several, some ten or twelve days before any frost appeared, and as far up as I pruned them they endured the winter well. I cut the leaves off about half an inch from the body, and after a few days the remaining part dried up and fell off, and the wood at the base of the leaf stalks had time to harden before the frost came.

REMOVING LARGE TREES.—I have never seen a notice upon removing large trees of any kind, but I would suggest the following method. Dig a trench in a circle around the tree from 3 to 6 feet in diameter, according to the size of the tree, and deep enough to cut off the greater part of the roots. Fill the trench again, and in the course of the summer the tree will send out a multitude of fibrous roots. In the fall open the trench again and fill it with straw, and when the ground is frozen enough take a rail and tie it to the trunk with a rope and lift it out and carry it to the place which was previously dug and filled with straw. Should there be roots running perpendicular cut them off, and in filling up, be careful to fill all the cavities. A. W.

Marcellus, N. Y., 1847.

A Valuable Invention.

We insert the following, because we think it will prove interesting and valuable to many of our readers. The card of the proprietors would be more appropriate in our advertising department, but we can not properly separate it from the figure and description of the Preserver:



Kephart's Patent Fruit and Vegetable Preserver.

Description.—The outer columns in the above cut represent wallls of stone, enclosing the inner construction.

The light shading at the bottom, descending to the center, represents the earth.

The dark shadings, A, A, and K, K, represent two boardings, with from six to ten inches space, and this space filled with a substance that will best exclude heat.

F is the Fruit Room, in which articles are to be placed for preservation.

C, C, a floor or cover to the fruit room, made water tight, with a coat of pitch over its surface to prevent moisture from penetrating.

I, an apartment to be filled with ice, supported by the floor, C, C, and designed to contain ice enough, when filled, to last during the whole year.

B, B, and D, D, are spaces around the fruit room, intended for the meltings of the ice on the top floor to pass off.—This ice water, as it passes down these spaces around the fruit room, and over the tight floor at bottom, in the space, D, D, serves to absorb any heat which may find its way through the non-conductor, K, K.

O, the outlet for ice water.

H, hatchway or entrance into fruit room.

The fruit room, F, is intended to be below ground, and the ice apartment, I, if desired, can be above; buildings above ground being now generally preferred for ice to those below ground.

It will be seen from the construction that the non-conducting substances, A, A, and K, K, are designed to prevent the admission of heat from the earth, at the sides and bottom, into the fruit room F; while the ice upon the floor, C, C, acts by keeping the fruit room at a constant uniform temperature, dry, and so cold as to exert a preserving influence upon articles placed therein.

A CARD.

The undersigned having purchased the above Patent Right for the United States, (excepting the states of New Jersey, Delaware, Maryland, and the cities of New York and St. Louis,) invite the attention of the Public to an examination of the scientific principles upon which the above invention is based, as well as its practical utility, and offer for sale patent rights for the construction and use of the Preserver by States, Cities, Counties, Towns, or individual rights, upon terms which will induce all interested in the growth and sale of Fruits and Vegetables, or in the curing and preservation of Meats—also dealers in Butter, Eggs, Bacon, &c.,—to purchase rights and construct Preservers.

As will be seen by the above drawing, its success depends entirely upon chemical truths.

The room F, in which Fruits, &c., are placed for preservation, will remain the whole year at a constant, uniform temperature, so near the freezing point as to arrest the rotting as well as the ripening process of fruits, &c., without danger of freezing them. That the fruit room F will remain at this temperature, will be evident from the fact that the air in contact with the floor C, C, on which the ice rests, becomes nearly as cold as ice itself. This condensed air will immediately sink, while the air at the bottom of the room, if but half a degree warmer, will rise to the floor C, C, and give off its heat—thus maintaining a uniform temperature corresponding with that in contact with the floor C, C.

Articles placed in this Preserver will remain as perfectly dry and free from moisture, as if kept in the best ventilated apartments. The air descending from the floor C, C, being always about half a degree colder than the boxes or barrels of fruit, &c., cannot deposit any moisture therein—it being an established fact that no object can condense moisture, unless colder than the air coming in contact with said object.

It is a theory long maintained by Liebig and other eminent chemists, that a temperature, dry, uniform, and near 32° Fahrenheit, will arrest the process of decay that takes place in fruits, vegetables, &c.,—but never, until the above invention, could the truth of the theory be tested.

Two years of experiments has proved the truth of the theory, and established the entire utility and success of the invention—as fruits, &c., foreign and domestic, viz: oranges, lemons, apples, pears, peaches, plums, grapes, &c., as well as the most delicate fruits—also potatoes, green corn, melons, &c., can be kept as long as desired. Add to these butter, eggs, bacon, lard, &c., which can be preserved throughout the year as fresh and sweet as when first placed in the Preserver.

Fruits, &c. in common temperatures undergo saccharine fermentation, or what is known by the mellowing or ripen process, which is followed by vinous, ascetous and putrefactive fermentation, which completes the rotting process. A temperature dry, and so low, arrests the first process towards decay—so that all fruits, &c., if placed in the Preserver when first plucked, will retain all their juices, freshness and flavor as when first plucked from the tree or vine.

It will readily be seen that the only way in which fruits, &c., can be kept during all seasons of the year, is by the plan offered in this invention—and one of its greatest advantages is that fruits, &c. can be preserved in all climates at a trifling cost, not only in the north where ice is produced, but in the south where it has become an article of extensive commerce. Being shipped in large cargoes, houses must be built for its reception; for this purpose the room I will be most appropriate—thus effecting the double purpose for selling ice from the top, and preserving fruits, &c. below.

All desirous of any further knowledge of the operations of this Preserver, can see one either by calling upon P. Kephart, Baltimore, or upon the undersigned Coates st. Wharf, near Fairmount, Philadelphia.

Flack, Thompson & Bro.

☞ All communications will receive prompt attention, if addressed either to Peter Kephart, Western Hotel, Baltimore, or to FLACK, THOMPSON & BRO.
Spring Garden P. O., Phila., Pa.

Horticultural Societies.

The "American Ag. Association" has taken measures to sustain periodical exhibitions of Horticultural productions during the season. The first was to be held on the 19th May.

The first public exhibition of the Mass. Hort. Society was to have been held on the 15th of May, when premiums were to be awarded for Green House plants, &c.

We learn from the Horticulturist that a Hort. Society was organized at Syracuse, on the 17th April, called the Onondaga Hort. Society. The officers—E. W. Leavenworth, Prest.; Rufus Cossitt, A. Dolbear, I. G. Tracey, and Dr. Loomis, Vice Presidents; Thos. Smith, Treasurer; D. C. Le Roy, Cor. Sec'y; and C. B. Sedgwick, Rec. Sec'y.

The *Horticultural Society of the Valley of the Genesee* held its first public exhibition on the 26th May.

LADIES' DEPARTMENT.

Floriculture.

Mr. Editor:—In a climate like ours where winter reigns four or five months, and nature is disrobed of her beautiful apparel for half the year, why is it that so few of our dwellings are ornamented with vases of flowers—so that while the wintry storm is raging around us, and the hail and sleet are rattling against our windows, the eye can be relieved from the sterility and cheerlessness without, by constant verdure and beauty within? Who can minutely examine a delicate flower, and not admire its wonderful mechanism? The cultivation of flowers, whether in the garden or the green-house, is a source of almost endless enjoyment. Ask the enthusiastic lover of flowers, who, with her own hands, cultivates them, if she is not compensated for all her labor. She watches over and nurtures her plants, as a gentle nurse doth her offspring. She discovers new beauty in every bud, and expatiates with delight upon each expanding flower. While arranging her vases, or weeding her border, she gaily sings:

I'll give thee, my flowers,
A portion of my hours;
And my hands I'll employ,
With gratitude and joy,
To rear thee;—while I live,
Ye'll unceasingly give
Vigor to my frame, happiness to my heart,
The hue of the rose to my cheek ye'll impart.

Life is a chequered scene. It has its lights and shadows—its joys and sorrows—and whatever enables us to increase our own happiness, or the happiness of those around us, should receive a due share of our attention. Human enjoyment is made up of little things. The cultivation of flowers has a tendency to soften the heart, to calm tumultuous feelings, and relieve us from the dull, monotonous, every-day cares of life. Let a person whose passions are highly excited be introduced into a well stored green-house, and its varied beauties pointed out to him, the tumult within will be calmed, and his countenance soon indicate smiles instead of frowns. I rejoice to find as I travel through the country, that there is an increasing interest taken in the cultivation of flowers in and around the house. When I see a dwelling, (I care not whether constructed of marble or of logs,) the windows of which are filled with vases of flowers, I think the hearts of the inmates of that house are made better by them. I often wonder why, in our villages, and in the country too, so few of the dwellings are ornamented with that beautiful appendage, the "Green House." *Home* should be made attractive. We should not spare reasonable time and expense to ornament our dwellings and grounds, so that our children may not spend their pastime and seek their enjoyments abroad, but find them in and around the paternal habitation.

My principal object in writing this article is to induce the fair readers of the "Farmer" to petition their husbands and fathers, to attach to their dwellings a green-house. Methinks I hear a large majority of my brother farmers, whose thoughts seem to be absorbed with fine wheat fields, luxuriant corn, handsome cattle, fat pigs, &c., exclaim, "What! expend twenty, fifty, or a hundred dollars to build a green-house, in which to raise flowers, that will not be *worth* any thing when they are grown?" But, my dear sirs, you forget that what contributes to the happiness of your family, friends, and neighbors—what pleases your wife and daughters, and affords them a delightful place for amusement and recreation, after going through with the dull routine of the kitchen, and the every day occurences of household affairs, *is* or *ought to be* worth something.

A family green-house should be attached to the south side of the room mostly occupied in winter, and if of small dimensions, say seven by fourteen feet, or even ten by twenty feet, can be warmed without any extra apparatus for heating, simply by an open door, or windows leading from the room to the green-house. If warmed in this way, the house should be made very tight, and without an outside door, as the frequent passing through the door would allow much heat to escape. I have a green-house arranged on the above plan, and during the past winter have made no fire in the arch during the day, and but on three or four occasions when the coldest nights occurred. When the sun shines, although the weather may be cold, my dining room, which is 15 by 18 feet, is often sufficiently warmed from the green-house alone. E. R. Porter.

Prattsburg, N. Y., April, 1847.

Hard Biscuit.—One quart of flour, and half a tea-spoonful of salt; four great spoonfuls of butter rubbed into two-thirds of the flour; wet it up with milk till a dough; roll it out again and again, sprinkling on the reserved flour till all is used; cut into round cakes, and bake in a quick oven on buttered tins.

Dahlias, Roses, Verbenas, &c.

We have on hand a very large stock of choice Dahlias, in pots ready for turning out, that we can sell at unusually low prices, viz: 12 good varieties for $2,00; 12 of the finest $6,00—selected by us.

Verbenas—15 fine varieties, good, strong plants, at $1,50 to $2,00 per dozen.

Petunias—6 select varieties, $1,50 to $2,00 per dozen.

Bourbon Roses,	$4,50	per dozen.	Strong plants with flower buds.
Chinese do.	3,00	do.	
Tea-scented do.	4,00	do.	
Noisetts, do.	4,00	do.	

Fuschias.—a splendid collection of 30 varieties—fine, strong plants, covered with buds; 12 fine varieties for $3,00; 12 of the best for $5,00.

The above plants are all in fine condition for turning into the border, and will furnish a profusion of flowers from July until the autumn frosts.

Plants packed in the best manner for transportation to any part of the country. Catalogues of Dahlias, Green House plants, &c., furnished *gratis* to all post paid applications.

ELLWANGER & BARRY,
Mount Hope Garden and Nurseries,

Kinderhook Wool Depot.

THIS enterprise has been in successful operation for the past two years, and has fully met the expectations of the wool-growers, who have been its patrons and projectors. It will be continued the present year, conducted as heretofore. The subscriber will be prepared to receive wool as soon after shearing as may be convenient for the growers to deliver it. The fleeces will be thrown into sorts according to *quality* and *condition*. Those who desire it can have their clip kept separate, and sold when ordered. A discrimination will be made between wool in good or bad condition. Sales will be made for cash, and the owners can rely on prompt returns. The charges for receiving, storing, sorting, and selling, will be one cent per lb. and insurance. Liberal advances in cash made on the usual terms. Sacks will be forwarded to those who wish, by their paying the transportation and 12½ cts. each for their use, or if furnished by the owner of the wool, will be returned, or sold at their value, as he may direct.

Reference can be had to Dr. J. P. Beekman, Kinderhook; D. S. Curtis, Canaan; C. W. Hull, New Lebanon, Col. Co.; J. B. Nott, Esq., Albany; D. Rodgers, Hoosick, Rens. Co.; C. H. Richmond, Esq., Aurora, Cayuga Co.; Col. J. Murdock, Wheatland, Monroe Co.

June 1, 1837.—3t. H. BLANCHARD.

Turnep Seed.

We have just received from England, by last Packet,

200	pounds	White Norfolk Turnep,	
200	"	Globe	do.
400	"	Ruta Baga	do.
50	"	Scotch Yellow	do.
100	"	assorted kinds	do.

Also 200 lbs. best English Field Carrot Seed—all of which we now offer for sale cheap, and warrant the seed genuine.

Farmers and dealers are respectfully requested to call at the *Genesee* (not Rochester) *Seed Store*, No. 18 Front st.

June 1, 1847. RAPALJE & BRIGGS.

PLOWS.

We have now on hand, and offer for sale at the manufacturers prices, seven varieties of PLOWS—among which are the *Iron Beam, Diamond*, and *Anthony's Improved Plow*.

We would particularly invite attention to the Anthony Plow, as it has a patent index attached to the beam, by which to change it from a two to a three horse plow. Farmers are requested to call and examine our stock before purchasing elsewhere. RAPALJE & BRIGGS,

Genesee Ag. Warehouse, 18 Front st.

Peas, Peas!—200 bushels Gold Vine Peas, just received from Canada, and free from bugs—for sale by R. & B. at the Genesee Seed Store. Those wishing a good article will please give us a call. It is not yet too late to sow them. June 1, 1847.

Choice Pear Trees.

ELLWANGER & BARRY offer for sale, in addition to the stock of their own growth, *one thousand beautiful Pear Trees for pyramids*—just received from Europe—in fine condition for planting. The assortment includes the most scarce and estimable varieties. Orders should be sent in at once.

E. & B.'s new catalogue of Green House plants is just published, and will be sent gratis to all post paid applications.

Agricultural Implements.

In order to accommodate the subscribers to the Farmer, from whom frequent inquiries and orders for implements are received, I have made arrangements to supply the following articles:

Pitts' Thrasher and Separator,	price,	$150 00
The above, including Horse-Power,		250 00
Pitts' Corn and Cob Mill,		40 00
Seymour's Sowing Machine,		45 00
Sanford's Straw-Cutter,		15 00
Burrall's Patent Corn-Sheller,		10 00

Also, most kinds of Plows, Cultivators, &c., &c., at the usual prices. As my only object is the accommodation of *subscribers to the Farmer* who reside at a distance, (without fee or reward,) all orders should be post paid and accompanied with the cash. The implements will be carefully selected, and shipped per order. D. D. T. MOORE.

Farmer Office, Rochester, April, 1847.

REMOVAL.

The Rochester Agricultural Ware House has been removed from Front-street to No. 23 Buffalo-street, Talman Block, opposite Reynolds' Arcade. See advertisement below.

Rochester Agricultural Ware-House,

HARD-WARE AND SEED STORE.

(*No. 23 Buffalo st., opposite Reynolds' Arcade.*)

Where can be found most kinds of GARDEN and FIELD SEEDS, Hard-ware, Tin-ware, Wooden-ware, Willow-ware, House Trimmings, Kitchen Furniture, &c.

The late proprietor of this Establishment, (THOS. NOTT,) feels grateful to his many patrons for their very liberal patronage during the past year, and would solicit a continuance of the same—promising to sell them as good articles in his line, and as cheap, as can be purchased at any other establishment west of Boston or New York. He has formed a co-partnership with Mr. E. J. ELLIOTT—and the business of the establishment will hereafter be conducted under the firm of NOTT & ELLIOTT.

We shall keep constantly on hand, a full assortment of *Shaker Garden and Flower Seeds*, the reputation of which needs no comment.

We are continually manufacturing the celebrated Massachusetts Sward C Plow—to which has been awarded the greatest number of Premiums—which we shall sell at the low price of $7, with an extra point. Also—shall keep on hand an assortment of the various approved Plows and Points, Cultivator Teeth, Root Cutters, Straw Cutters, and Corn Shellers—with a hundred and one other articles, too tedious to mention.

Farmers from a distance, as also those in our immediate vicinity, are respectfully solicited to call at our new establishment, and examine our assortment before purchasing elsewhere. NOTT & ELLIOTT,

Rochester, Jan. 1, 1847. No 23 Buffalo-street.

To New York Farmers and Emigrants.

ILLINOIS LANDS FOR SALE.—115,000 acres, in tracts of 40, 80, 120, 160, acres, or more, to suit purchasers. The lands are all first rate, and among the very best in the State, and are situated in the counties most densely settled, viz. Morgan, Scott, Cass, Mason, Menard, Green, Sangamon, Logan, Christian, Macon, McLean Woodford, and Macoupin. To actual settlers every reasonable indulgence will be given as to time of payment. The price from $3 to $5 per acre.

A correspondent of one the New York papers writes, respecting this section of Illinois, as follows:

BEARDSTOWN, Cass Co., Ill., Jan. 10, 1846.

The Riches of the West—Gothamites on the Wing.—It is now six weeks since I left the city of Gotham, during which time I have seen considerable of the Western country, and I must say the beautiful prairies of Illinois far excel what I had anticipated, and this country may truly be called the garden of the world. There is nothing to prevent farmers in this country from getting rich, as the land is the most fertile in the world, and it will produce everything grown in the vegetable kingdom.

A New England man would hardly believe me if I would tell him that some farmers here produce ten thousand bushels of corn and half as many bushels of wheat in a year, to say nothing of cattle and hogs, of which some raise as many as five hundred head. One farmer told me he had raised, the last year, 6,300 bushels of corn, and it was all produced by the labor of two men only.

Cattle and sheep feed upon the prairies all winter, as they are seldom covered with snow."

Most of the above lands may be cultivated 100 years or more without manuring, being of the richest alluvial soil. The titles are indisputable and the lands will be sold at low prices and in quantities to suit purchasers. Letters (post paid) addressed to D. B. AYRES, Esq., of Jacksonville, Ill., or to the subscriber, will receive prompt attention. As many persons out of the State have an idea that the taxes are very burdensome in Illinois, we state that they range from $1,50 to $2,00 per annum on 80 acres of land.

JOHN GRIGG,

No. 2 North Fourth-st. Philadelphia.

March 1, 1847. [3t]

Genesee Seed Store and Agricultural Warehouse.

No. 18 (OLD No. 10,) FRONT ST., ROCHESTER.

AT this Establishment can be found all sorts of GARDEN and FIELD SEEDS, a large and excellent assortment of Flower Seeds—a large lot of Clover and Timothy Seed, Orchard and Lawn Grass, Red Top, Lucerne, White Dutch Clover, Millet, Hemp, Flax Seed, Spring Wheat, Spring Rye, Buckwheat, Barley, Oats, different kinds Peas and Beans, Seed Corn of different kinds, various kinds of Seed Potatoes, Potato Onions, Onion Sets, Top Onions, &c., &c.

IMPLEMENTS, MACHINES, &c., such as Pennock's Patent Wheat Drill—Broad Cast Sowing Machines—Corn Planters, Seed Sowers, Fanning Mills—10 different kinds of Straw Cutters, prices from $3 50 to $28—I lows as follows: Massachusetts Subsoil, various sizes, do. Sward C, do. Eagle 25, do. different sizes Side Hill, Michigan Subsoil, Delano or Diamond Plows, Burrall's Wheel Plow, Wisconsin Plow, Gang and Corn Plows, and several kinds of plow points—Cob and Corn Grinders, different kinds of Corn Shellers, one and two horse Cultivators, Langdon's Horse Hoe or Cultivator, Drags and Drag Teeth; Horse and hand rakes, various kinds of garden rakes—steel and iron shovels and spades of different kinds—cast-steel and steel plated hoes, different kinds—ladies garden spades and hoes, toy spades and hoes—cast-steel and German steel manure forks and hooks—grain cradles; cradle, grass and bush scythes—bush and grass hooks; grain sickles; Hay knives; grafting, pruning and budding knives; clover and grass seed sieves, pea sieves—cheese presses, hoops and tubs—common and patent churns—cattle knobs and bull rings—curry combs and horse cards—ox yokes and bows—hedge shears, pruning saws—Canary birds and cages—hot bed plants in their season—Eglantine or Michigan running rose roots—and many other things which a limited space will not allow us to mention.

We have done business through one season, and are pleased to be able to say that we have been more liberally patronized than we anticipated when we began. We hope, and believe, that we have so dealt with those who have favored us with their custom, that *they* will not hesitate to give us their favors hereafter—and we hope *others* will try us. All favors will be duly and thankfully appreciated.

AGENTS.—The following persons are Agents for the sale of Garden, Field and Flower Seeds, put up at the above named Establishment:—

Attica, L. Doty,
Albion, Nickison & Paine,
Adams Basin, C. D. Graves,
Adrian, Mich., D. H. Underwood,
Auburn, Quick and Hall,
Aurora, H. & G. P. Morgan,
Batavia, J. P. Smith,
Buffalo, E. Rawson,
do. T. C. Peters,
do. H. O. Hayes,
Brockport, H. Lathrop,
Canandaigua, Chipman & Remington,
Cobourg, C. W., G. Boyer,
Dansville, M. Halstead & Co.
Detroit, Mich., F. F. Parker & Brother,
Geneseo, Bond & Walker,
Geneva, Lawrence & Barnes
Holley, H. N. Bushnell,
Havanna, G. T. Hinman,
Ithaca, Schyler & Co.,
Jackson, Mich., S. Chadwick
Le Roy, J. Annin,
Lewiston, H. F. Hotchkiss & Co.,
Lockport, Wm. Keep & Co.,
Lyndonville, E. Bowen,
Mt. Morris, L. J. Ames,
Medina, J. Nichols & Son,
Middleport, J. Craig,
Milwaukie, W. T., J. S. Moulthrop,
Niagara, C. W., Wm. Johnson & Son,
Penn Yan, E. H. Huntington
Pt. Byron, Kendrick & Yates
Scottsville, Caleb Allen, esq.
Seneca Falls, Joseph Osborn
Skaneateles, C. Pardee & Co
Syracuse, E. J. Foster,
Utica, J. E. Warner & Co.,
Union Springs, W. Cozzens,
Vienna, S. E. Norton,
Youngstown, A. Emerson.

☞ Garden Seeds put up at this Establishment can be found at most of the Stores in the State of New York west of Utica, and in some parts of Canada.

RAPALJE & BRIGGS.

Rochester, April, 1847. (4-tf)

Seedling Apple Trees wanted.—The subscriber wishes to purchase a few thousand seedling Apple Trees. Apply personally, or by mail, to S. MOULSON,
Rochester, Jan. 1, 1847.

Bound Volumes of the Farmer.

A few copies of Volume VI, bound, for sale at this office. Price 50 cents. Also, bound copies of Volume VII, 1846.

Rochester Seed Store.

[Established in 1831.]

No. 4 FRONT STREET, NEAR BUFFALO STREET.

By JAMES P. FOGG.

The subscriber begs leave to say to Farmers, and others, who have for the last three years so liberally patronized the *Old Rochester Seed Store*, that he has fitted up the Store, No. 4 Front street, on the west side of Front street, where he will be happy to see all who may want any article usually to be found in a Seed Store.

The subscriber is well aware of the important relation which the seedman holds to the whole farming community, and that on his honor and veracity the crop and profit of a season in some measure depend. The greatest care has been used in selecting the seeds offered at this establishment for the ensuing year, and they can be relied upon as pure and genuine, carefully selected and raised from the very best varieties, and properly cured. Many kinds were raised in the immediate vicinity of this city, by Mr. C. F. Crosman, and under the inspection of the proprietor; others were raised by experienced seed growers, and all can be recommended as genuine and true to their kinds.

AGENTS for the sale of seeds by the package, put up at the old Rochester Seed Store:

Attica, H. D. Gladding,
Amsterdam, J. W. Sturtevant
Auburn, J. H. Hudson,
" James B. Cooper,
Albion, Charles W. Perkins,
Buffalo, W. & G. Bryan',
Batavia, F. Follett, P. M.
Canandaigua, L. C. Cheney & Co.,
Cazenovia, Dr. A. Ford,
Castile, Halsted & May,
Elmira, Tracy Beadle,
Geneva, Hemiup & Cone,
Geneseo, L. Turner.
Homer, W. Sherman & Son,
Ithaca, Lewis H. Culver,
Le Roy, J. J. J. Thompkins,
Lockport, S. H. Marks & Co
Mumford, A. O. Comstock,
Mount Morris, R. Sleeper,
Owego, C. & E. Canfield,
" Meade & Carrington
Perry, R. H. Smith,
Penn Yan, John H. Lapham,
Palmyra, Wm. May,
Port Byron, Kendrick & Yates.
Scottsville L. C. Andrus,
Schenectady, D. L. Powell,
Syracuse, Tallman & Williams.
Utica, J. E. Warner & Co.,
Wyoming, J. C. Farris & Son.
Cleveland, Ohio, J. W. Watson,
Columbus, O., John Miller
Mount Vernon, O., H. A. Raymond & Co.,
Sandusky City, O., W. T. & A. K. West,
Toledo, O., Raymond & Co.,
Adrian, Mich., Howard, Smith, & Co.,
Detroit, Mh., J. W. Strong Jr.,
Monroe, Mh., L. B. Wing,
Pontiac, " Rogers & Dunklee,
Ypsilanti, Mich., Hewitt, Brothers & Co.,
Chicago, Ill., N. Sherman
Milwaukie, W. T., Holton & Goodall,
" W. M. Cunningham,
Brantford, C. W., Charles Woollett,
Brockville, C. W., Allen Turner,
Chatham, C. W., Eberts & Robinson,
Hamilton, C. W., S. Kerr & Co.,
Kingston, C. W. C. Heath
London, " Ed. Adams,
St. Catharines, C. W., L. S. St. Johns.
Toronto, C. W. R. Love,
Port Hope, " C. Hughes

Garden Seeds put up at this establishment in small papers, may be found with most of the merchants in the States of New York, Ohio and Michigan, and in Canada.

Rochester, N. Y. JAMES P. FOGG.

Flower Seeds.

" The storms of winter fly,
Earth smiles with flowers renewing."

I have on hand a superior assortment of about one hundred varieties of flower seeds, raised by Messrs. Ellwanger & Barry, and Mr. Wm. King, of Rochester, W. R. Prince & Co., of Flushing, and Hovey & Co., of Boston, which can recommend to the ladies who wish to compete for the splended premiums offered by the Horticultural Society, as being by far the best ever offered in this city. They wil be put up in boxes containing 25 choice varieties, for one dollar, with a catalogue, stating the duration of the plants, the color of the flower, and the time of flowering. For sale at the Rochester Seed Store. The first Seed Store on Front street, No. 4. JAMES P. FOGG.

Clover and Timothy Seed.—500 bushels of Clover and Timothy Seed, for sale at the Genesee Seed Store, No. 18, (old No. 10,) Front street, by

Rochester, April 1, 1847. RAPALJE & BRIGGS.

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,	1,62½		Pork, bbl, mess	15,00	
Corn,	63	70	Pork, cwt,	5,00	
Barley,			Beef, cwt,	5,00	
Oats,	45		Lard, lb,	8	9
Flour,	7,50		Butter, lb,	10	12
Beans,	87	1,00	Cheese, old, lb.,	7	7½
Apples, bushel	50	75	Eggs, doz,	8	
Potatoes,	50		Poultry,	7	
Clover Seed,	4,00		Tallow,	9	
Timothy,	1,50		Maple Sugar,	8	
Hay, ton,	8,50		Sheep Skins,	75	1,25
Wood, cord,	2,50	3,50	Green Hides, lb	3½	
Salt, bbl,	1,06		Dry "	7	8
Hams, lb,	7	8	Calf Skins,	8	

Rochester, May 26, 1847.

[*By Magnetic Telegraph.*]

NEW YORK, May 25—7 P. M.

ASHES.—The demand for Pots is fair at $5 *a* $5,09, according to tares with sales 250 bbls. Pearls $6,10, with sales 50 bbls.

FLOUR and WHEAT.—The inquiry has continued good for flour, but the advance has been checked and a little re-action took place. The market is perhaps 6d lower than the highest point of yesterday. The receipts of flour since Friday are 50,000 bbls. The demand to-day has taken all the receipts, say 10,000 to 12,000 bbls. at $8,75 *a* 8,81½ with occasionally a parcel of Michigan at $8,62.

GRAIN.—There are but few samples of wheat offering, and the only sale is 2000 bu. Ohio at $2. Corn was in moderate supply, and the market was scarcely so firm. The sales are some 25,000 bu. at $1,10 *a* $1,15 for mixed and yellow; at the close yellow would not bring over $1,12 *a* 1,13.

The sales for future delivery reach 75,000 bu. at $1,03 for June, and 95 cts. *a* $1 for July and August. Rye is heavier with sales 5 or 6000 bu. at $1,43 *a* $1,47. Nothing doing in Barley. Oats retailing at 72 *a* 73 cts. Sales 10,000 bu. at 70 cts in one lot. The demand for beans and peas continues, and 1000 bu. sold at $1,18½ for field, and $1,37½ for Marrowfat Peas.

PUBLISHERS' NOTICES.

A Liberal Offer!

WE have a thousand sets of the Farmer from the commencement of the present volume—and can therefore supply that number of new subscribers. Who will lend their aid in obtaining them? At the present price, one bushel of wheat will pay for *four copies*, (at our club terms,) and still there are thousands of able farmers, even in Western New York, so *very poor* that they cannot afford to take the *Genesee Farmer!*

☞ Any person sending us $3, free of expense, after this date, will receive *eight copies* of the present volume, *and a copy of vol.* 6 *or* 7, *as he may prefer*. Think of this, reader, and see what can be done among your agricultural friends.

To Clubs.—Any Post Master or other person who has sent us eight or more subscribers, will be furnished with any additional number of copies at the club price—37½ cents each. We hope those who have formed clubs, will bear this in mind, and forward the subscriptions of such as may hereafter want the Farmer. Back numbers can be supplied—so that all may have the entire volume.

☞ Acknowledgment of club subscriptions next month.

A Word to Farmers.

SAGE & BROTHER have received a very fine assortment of Agricultural Works, peculiarly adapted to the intelligent cultivators of the earth, who combine science with labor, and thereby render their farms doubly productive.

The works are from the pens of Downing, Fessenden, Kendrick, Thomas, Buel, Youatt, Clater, and a host of others, who have lived and written for the good of the agriculturist, and proved themselves benefactors to their race.

Call and see at No. 40 Buffalo, corner State Street.

Rochester, June 1, 1847.—3t.

Sale of Short Horned Cattle.

IN consequence of becoming over-stocked, I will offer for sale, at Auction, at my residence in the town of Auburn, on Wednesday, the 8th day of September next, *forty head of thorough bred Short Horned Cattle*—consisting of about thirty Cows and Heifers, and ten young Bulls. I shall select from my whole herd one Bull, "Symmetry," two Cows, and two Heifers, which I shall not offer for sale. The balance, being about *forty, will be sold without reserve.*

The original cows of this herd were selected from the best of the herds of the late PATROON VAN RENSSELAER, FRANCIS ROTCH, and L. F. ALLEN, Esqs., whose reputation as breeders of fine stock requires no eulogy from me. The younger stock were bred with much care from my Bulls Archer and Symmetry, both of which have received the prize as the best Bull at the Exhibitions of the New York State Agricultural Society. Archer was bred by FRANCIS ROTCH, Esq., out of his famous imported cow "Adaliza," and got by "Rolla," (see Coats' Herd Book, No. 4991.)—Symmetry was bred by GEO. VAIL, Esq., of Troy, out of his Cow Dutchess, and got by his Duke of Wellington, (see Coat's Herd Book, No. 3654, or American Herd Book, No. 55,) both of which he imported from the herd of THOMAS BATES, Esq., of Yorkshire, England. Full pedigrees of all the Cattle will be printed and ready by the 1st of July.—They can be had by applying to A. B. ALLEN, New York; LUTHER TUCKER and B. P. JOHNSON, Albany; Office of the Genesee Farmer, Rochester; L. F. ALLEN, Black Rock, or at my residence.

Also, I will sell *ten* three-fourths and half bred Cows and Heifers.

After the sale of the above Cattle, I will sell at Auction, one hundred *Merino Rams*, ten to fifteen *South Down Rams*, sixty *Merino* and thirty *grade Merino Ewes*. The Ewes will be sold in pens of three.

That gentlemen not acquainted with my flock of Sheep may form some opinion of their value, I make the following statement, viz: I have taken *five* clips of wool from my Sheep. The clip of 1846 averaged a fraction over four lbs. per head; this was the largest. One of the five clips I sold at thirty-nine cents, the other four I sold to *one* Manufacturing Company at different times, at *forty cents per lb.—all at my own house.*

Terms of the sale, Cash or approved endorsed notes, payable at the Bank of Auburn, at three months with interest.

J. M. SHERWOOD.

Auburn, Cay. Co., N. Y., June 1, 1847.

Agent at Lyons.—Mr. E. HOPKINS, Periodical Agent, is our authorized agent at Lyons, Wayne county. Mr. H. will furnish back volumes (bound,) and also receive subscriptions for the current volume.

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